



# **Garfield County**

## **Hazard Mitigation Plan**

### **2015 – 2020**

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**Developed by:**  
Garfield County Hazard  
Mitigation Planning Team

**Prepared by:**  
**Hazard Mitigation Specialists, L.L.C.**  
Yukon, Oklahoma

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**RESOLUTION OF THE GARFIELD COUNTY BOARD OF COUNTY  
COMMISSIONERS ADOPTING THE GARFIELD COUNTY HAZARD  
MITIGATION PLAN FOR GARFIELD COUNTY, OKLAHOMA**

**RESOLUTION #** 16-13

WHEREAS, the Multi-Hazard mitigation Plan (the PLAN) for Garfield County is presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C. 4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

WHEREAS, the purpose of this Plan is to provide guidance for the County and participating jurisdictions hazard mitigation activities for the next five years and to ensure that Garfield County, participating jurisdictions and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

NOW, THEREFORE, BE IT RESOLVED BY THE GARFIELD COUNTY BOARD OF COUNTY COMMISSIONERS;

That this Multi-Hazard Mitigation Plan for Garfield County, under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Garfield County Board of County Commissioners;

APPROVED by the Garfield County Board of County Commissioners, this 1<sup>st</sup> day of February, 2016

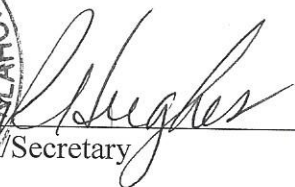
BOARD OF COUNTY COMMISSIONERS  
GARFIELD COUNTY, OKLAHOMA

Chairman

  
Vice-Chairman

  
Member



  
County Clerk/Secretary

PLACE HOLDER  
For  
Town of Breckinridge  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Breckinridge Town Council intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.



PLACE HOLDER  
For  
Town of Carrier  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Carrier Town Council intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.

**RESOLUTION**  
**Town of Covington, Garfield County, Oklahoma**

**Resolution Number #02-03-16**

**RESOLUTION OF THE TOWN OF COVINGTON MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN  
FOR THE TOWN OF COVINGTON , OKLAHOMA.**

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of Covington hazard mitigation activities for the next five years and to ensure that the Town of Covington and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF COVINGTON MAYOR AND TOWN COUNCIL;**

That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of Covington Mayor and Town Council ;

**APPROVED** by the Mayor and Town Council, this 3rd day of February, 2016

**TOWN OF COVINGTON MAYOR AND TOWN COUNCIL**

Mayor

ATTEST:

Town Clerk

PLACE HOLDER  
For  
Town of Douglas  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Douglas Town Council intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.



PLACE HOLDER  
For  
Town of Drummond  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Drummond Town Council intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.

## RESOLUTION

### A RESOLUTION ADOPTING THE MULTI-HAZARD MITIGATION PLAN FOR THE CITY OF ENID

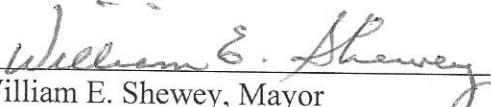
**WHEREAS**, the Multi-Hazard Mitigation Plan (the Plan) for The City of Enid is presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP), as outlined by the Federal Emergency Management Agency, according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C.4154, enacted under Section 104 of the Disaster Mitigation Act of 2000, P.L. 106-390, and;

**WHEREAS**, the purpose of the Plan is to provide guidance for the City of Enid's hazard mitigation activities for the next five years, and to ensure that the City of Enid implements activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW THEREFORE, BE IT RESOLVED** by the Mayor and Board of Commissioners of the City of Enid, Oklahoma, that this Hazard Mitigation Plan for the City of Enid, under the multi-jurisdictional planning participation and adoption process, and presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the City of Enid Mayor and Board of Commissioners.

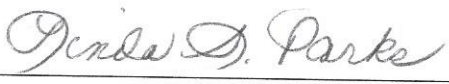
APPROVED AND ADOPTED this 18th day of February, 2016.

The City of Enid, Oklahoma

  
William E. Shewey, Mayor

(SEAL)

ATTEST:

  
Linda S. Parks, City Clerk

Approved as to form and legality

  
Andrea L. Chism, City Attorney

PLACE HOLDER  
For  
Town of Fairmont  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Fairmont Town Council intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.



PLACE HOLDER  
For  
Town of Garber  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Garber Town Council intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.

RESOLUTION  
Town of Hillsdale, Garfield County, Oklahoma

Resolution Number 1

RESOLUTION OF THE TOWN OF HILLSDALE MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN FOR  
THE TOWN OF HILLSDALE, OKLAHOMA.

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of Hillsdale hazard mitigation activities for the next five years and to ensure that the Town of Hillsdale and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF HILLSDALE MAYOR AND TOWN COUNCIL;

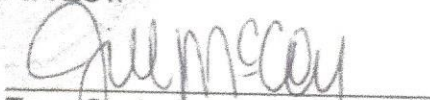
That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of Hillsdale Mayor and Town Council ;

**APPROVED** by the Mayor and Town Council, this 11 day of Feb, 2016

TOWN OF HILLSDALE MAYOR AND TOWN COUNCIL

  
\_\_\_\_\_  
Mayor

ATTEST:

  
\_\_\_\_\_  
Town Clerk

**RESOLUTION**  
**Town of Hunter, Garfield County, Oklahoma**

Resolution Number \_\_\_\_\_

**RESOLUTION OF THE TOWN OF HUNTER MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN FOR  
THE TOWN OF HUNTER , OKLAHOMA.**

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;


**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of Hunter hazard mitigation activities for the next five years and to ensure that the Town of Hunter and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF HUNTER MAYOR AND TOWN COUNCIL;**

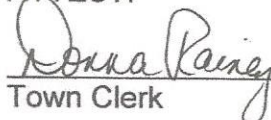
That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of Hunter Mayor and Town Council ;

**APPROVED** by the Mayor and Town Council, this 9<sup>th</sup> day of February, 2016

**TOWN OF HUNTER MAYOR AND TOWN COUNCIL**

  
\_\_\_\_\_  
Mayor

**ATTEST:**

  
\_\_\_\_\_  
Town Clerk



**RESOLUTION**  
**Town of Kremlin, Garfield County, Oklahoma**

Resolution Number \_\_\_\_\_

**RESOLUTION OF THE TOWN OF KREMLIN MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN FOR  
THE TOWN OF KREMLIN , OKLAHOMA.**

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

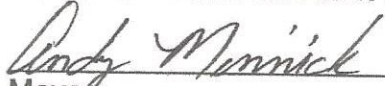
**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of Kremlin hazard mitigation activities for the next five years and to ensure that the Town of Kremlin and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF KREMLIN MAYOR AND TOWN COUNCIL;**

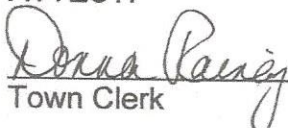
That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of Kremlin Mayor and Town Council ;

**APPROVED** by the Mayor and Town Council, this 15 day of Feb., 2016

**TOWN OF KREMLIN MAYOR AND TOWN COUNCIL**

  
\_\_\_\_\_  
Mayor

**ATTEST:**

  
\_\_\_\_\_  
Town Clerk

**RESOLUTION**  
**Town of Lahoma, Garfield County, Oklahoma**

Resolution Number 2016-02

**RESOLUTION OF THE TOWN OF LAHOMA MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN FOR  
THE TOWN OF LAHOMA , OKLAHOMA.**

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of Lahoma hazard mitigation activities for the next five years and to ensure that the Town of Lahoma and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF LAHOMA MAYOR AND TOWN COUNCIL;**

That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of Lahoma Mayor and Town Council ;

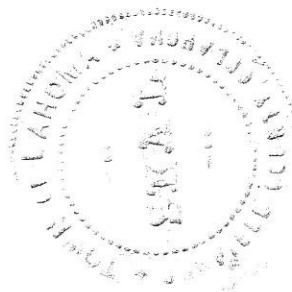
**APPROVED** by the Mayor and Town Council, this 8<sup>TH</sup> day of FEBRUARY, 2016

**TOWN OF LAHOMA MAYOR AND TOWN COUNCIL**

Janice Sharp  
Mayor

ATTEST:

C. E. Henderson  
Town Clerk





**RESOLUTION**  
**Town of North Enid, Garfield County, Oklahoma**

**Resolution Number #228-16**

**RESOLUTION OF THE TOWN OF NORTH ENID MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN FOR  
THE TOWN OF NORTH ENID , OKLAHOMA.**

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of North Enid hazard mitigation activities for the next five years and to ensure that the Town of North Enid and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF NORTH ENID MAYOR AND TOWN COUNCIL;**

That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of North Enid Mayor and Town Council ;

**APPROVED** by the Mayor and Town Council, this 9<sup>th</sup> day of February, 2016

**TOWN OF NORTH ENID MAYOR AND TOWN COUNCIL**

*Matthew J. Miller*  
Mayor

ATTEST:

*Shella Zurek*  
Town Clerk



**RESOLUTION**  
**Town of Waukomis, Garfield County, Ok**

Resolution Number 2016-1

**RESOLUTION OF THE TOWN OF WAUKOMIS MAYOR AND TOWN COUNCIL  
ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN FOR  
THE TOWN OF WAUKOMIS , OK.**

**WHEREAS**, the Multi-Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of this Plan is to provide guidance for the County and participating jurisdictions, including the Town of Waukomis hazard mitigation activities for the next five years and to ensure that the Town of Waukomis and other partners implement activities that are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN OF WAUKOMIS MAYOR AND TOWN COUNCIL;**

That this Natural Hazard Mitigation Plan under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Town of Waukomis Mayor and Town Council ;

**APPROVED** by the Mayor and Town Council, this 4 day of FEBRUARY, 2016

**TOWN OF WAUKOMIS MAYOR AND TOWN COUNCIL**

\_\_\_\_\_  
Mayor

ATTEST:

Joshua Shupe  
Town Clerk



**RESOLUTION**  
**Chisholm Public School District, Garfield County, Oklahoma**

Resolution Number 2-10-16-1

**RESOLUTION OF THE CHISHOLM PUBLIC SCHOOL DISTRICT BOARD OF  
EDUCATION ADOPTING THE GARFIELD COUNTY NATURAL HAZARD  
MITIGATION PLAN**

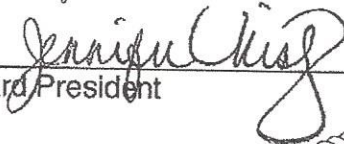
**WHEREAS**, the Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of the Plan is to provide guidance for the County and participating school districts, including the Chisholm Public School District, for hazard mitigation activities over the next five years and to ensure that the mitigation activities are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE CHISHOLM PUBLIC SCHOOL DISTRICT;**

That this Natural Hazard Mitigation Plan for Garfield County and participating jurisdictions, including Chisholm Public Schools under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Board of Education of the Chisholm Public School District;

**APPROVED** by the Chisholm Public School District Board of Education, this 10<sup>th</sup> day of February, 2016.

  
\_\_\_\_\_  
Board President

ATTEST:

  
\_\_\_\_\_  
Board Secretary





**RESOLUTION**  
**Cimarron Public School District, Garfield County, Oklahoma**

Resolution Number \_\_\_\_\_

**RESOLUTION OF THE CIMARRON PUBLIC SCHOOL DISTRICT BOARD OF  
EDUCATION ADOPTING THE GARFIELD COUNTY NATURAL HAZARD  
MITIGATION PLAN**

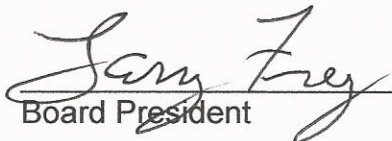
**WHEREAS**, the Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of the Plan is to provide guidance for the County and participating school districts, including the Cimarron Public School District, for hazard mitigation activities over the next five years and to ensure that the mitigation activities are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE CIMARRON PUBLIC SCHOOL DISTRICT;**

That this Natural Hazard Mitigation Plan for Garfield County and participating jurisdictions, including Cimarron Public Schools under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Board of Education of the Cimarron Public School District;

**APPROVED** by the Cimarron Public School District Board of Education, this 8 day of Feb, 2016.

  
\_\_\_\_\_  
Board President

ATTEST:

  
\_\_\_\_\_  
Board Secretary

PLACE HOLDER  
For  
Covington-Douglas Public School District  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Covington-Douglas Public School District Board intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.

**RESOLUTION**  
**Drummond Public School District, Garfield County, Oklahoma**

Resolution Number IØ85

**RESOLUTION OF THE DRUMMOND PUBLIC SCHOOL DISTRICT BOARD OF  
EDUCATION ADOPTING THE GARFIELD COUNTY NATURAL HAZARD  
MITIGATION PLAN**

**WHEREAS**, the Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

**WHEREAS**, the purpose of the Plan is to provide guidance for the County and participating school districts, including the Drummond Public School District, for hazard mitigation activities over the next five years and to ensure that the mitigation activities are most effective and appropriate for mitigating natural hazards events, and;

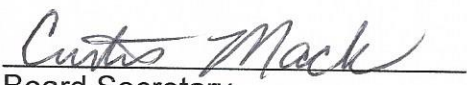
**NOW, THEREFORE, BE IT RESOLVED BY THE DRUMMOND PUBLIC SCHOOL DISTRICT;**

That this Natural Hazard Mitigation Plan for Garfield County and participating jurisdictions, including Drummond Public Schools under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Board of Education of the Drummond Public School District;

**APPROVED** by the Drummond Public School District Board of Education, this 9 day of February, 2016.

  
Board President

ATTEST:

  
Board Secretary



**RESOLUTION # 619**  
**Independent School District #57, Garfield County, Oklahoma**

**Enid Public Schools**

**Resolution of the Enid Board of Education adopting the Garfield County Natural Hazard Mitigation Plan**

**Whereas**, the Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;


**Whereas**, the purpose of the Plan is to provide guidance for the County and participating school districts, including the Enid Public Schools, for hazard mitigation activities over the next five years and to ensure that the mitigation activities are most effective and appropriate for mitigating natural hazards events;

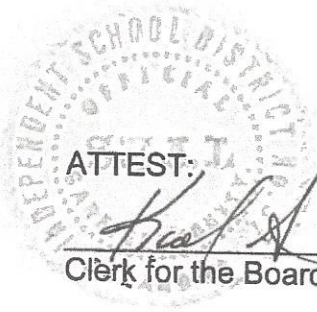
**Now, therefore, be it resolved**, that this Natural Hazard Mitigation Plan for Garfield County and participating jurisdictions, including Enid Public Schools under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Board of Education of the Independent School District #57;

**Approved** by the Enid Board of Education, this 15th day of February, 2016.

  
Board President (Acting)

ATTEST:

  
Clerk for the Board of Education



PLACE HOLDER  
For  
Garber Public School District  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Garber Public School District Board intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.



**RESOLUTION**  
**Kremlin-Hillsdale Public School District, Garfield County, Oklahoma**

Resolution Number \_\_\_\_\_

**RESOLUTION OF THE KREMLIN-HILLSDALE PUBLIC SCHOOL DISTRICT BOARD OF EDUCATION ADOPTING THE GARFIELD COUNTY NATURAL HAZARD MITIGATION PLAN**

**WHEREAS**, the Hazard Mitigation Plan (the PLAN) for Garfield County has been presented in fulfillment of requirements of the Hazard Mitigation Grant Program (HMGP) as outlined by the Federal Emergency Management Agency (FEMA) according to Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C.4154, enacted under Sec 104 the Disaster Mitigation Act of 2000, (DMA 2000) P.L. 106-390, and;

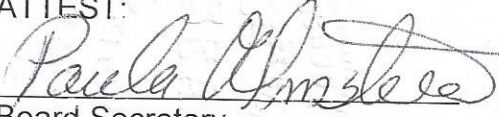
**WHEREAS**, the purpose of the Plan is to provide guidance for the County and participating school districts, including the Kremlin-Hillsdale Public School District, for hazard mitigation activities over the next five years and to ensure that the mitigation activities are most effective and appropriate for mitigating natural hazards events, and;

**NOW, THEREFORE, BE IT RESOLVED BY THE KREMLIN-HILLSDALE PUBLIC SCHOOL DISTRICT;**

That this Natural Hazard Mitigation Plan for Garfield County and participating jurisdictions, including Kremlin-Hillsdale Public Schools under the multi-jurisdictional planning participation and adoption process, presented in realization of requirements of the HMGP for the Federal Emergency Management Agency, according to the sections cited above, is hereby approved and adopted by the Board of Education of the Kremlin-Hillsdale Public School District;

**APPROVED** by the Kremlin-Hillsdale Public School District Board of Education, this 10<sup>th</sup> day of February, 2016.

  
\_\_\_\_\_  
Board President

ATTEST:  
  
\_\_\_\_\_  
Board Secretary

PLACE HOLDER  
For  
Pioneer- Pleasant Vale Public School District  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Pioneer - Pleasant Vale Public School District Board intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.

**PLACE HOLDER**  
**For**  
**Waukomis Public School District**  
**Adoption Resolution**

**Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Waukomis Public School District Board intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.**

PLACE HOLDER  
For  
Autry Technology Center  
Adoption Resolution

Once the plan has been reviewed and approved pending adoption by Oklahoma Emergency Management and FEMA, the Autry Technology Center Board intends to formally adopt the Garfield County Hazard Mitigation Plan and provide an adoption resolution for approval.

# CHAPTER ONE

## Plan Strategy

### Introduction

Preventing the disaster-rebuild-disaster cycle is a major initiative of the Federal Emergency Management Agency (FEMA). Disasters cannot be controlled, but human activities can minimize damages. One of the goals of FEMA is to reduce or prevent potential damage from various natural disasters. FEMA has initiated programs to make investments in communities that will reduce the amount of money it takes for a community to recover from a disaster. This risk reduction is known as Hazard Mitigation and the process to achieve it is outlined in a Hazard Mitigation Plan.

A Hazard Mitigation Plan provides a systematic, objective review of a political jurisdiction and describes what steps can be taken to reduce a disaster's harmful effects. Among the benefits of maintaining a Hazard Mitigation Plan are:

- Ensures that hazard mitigation activities are coordinated with other community goals, preventing conflicts and reducing the costs of implementation.
- Ensures that all alternatives are evaluated so that problems are addressed by the most appropriate and effective solutions.
- Educates residents and other planning participants on existing hazard and protection measures.
- Justifies public and political support for projects.

The Plan is designed to fulfill the requirements of the following programs administered by the Federal Emergency Management Agency (FEMA):

- a. Pre-Disaster Mitigation Program (PDM),
- b. Flood Mitigation Assistance Program (FMA),
- c. Community Rating System Floodplain Management Planning (CRS)
- d. Post-disaster assistance through the Hazard Mitigation Grant Program (HMGP).
- e. Severe Repetitive Loss Program (SRL)
- f. Repetitive Flood Claims Program (RFC)

In the past, the **Robert T. Stafford Disaster Relief and Emergency Assistance Act** has provided funding for disaster relief, recovery, and some hazard mitigation planning. The Disaster Mitigation Act of 2000 (DMA 2000) has been updated to meet the growing concern and needs of natural hazard mitigation. Due to more occurrences of disasters in the United States in

recent years, including Oklahoma, the challenge to eliminate or reduce the effects of natural disaster on jurisdictions and their citizens falls primarily to the local jurisdictions to resolve the problem.

The escalating cost of emergency relief aid has prompted the Federal Emergency Management Agency (FEMA) to focus its priorities toward mitigation. This is a dramatic shift from FEMA's traditional charter of responding to disasters and being prepared to respond.

Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5165, enacted under the Disaster Mitigation Act (DMA) of 2000 (P.L. 106-390), provides new and revitalized approaches to mitigation planning. Section 322, in concert with other sections of the Act, provides:

- (b) Local and Tribal Plans - Each mitigation plan developed by a local or tribal government shall –
  - (1) Describe actions to mitigate hazards, risks, and vulnerabilities identified under the plan; and
  - (2) Establish a strategy to implement those actions. A major requirement of the law is the development of local hazard mitigation plans.

Local mitigation plans must be reviewed, updated and submitted to the State Hazard Mitigation Division, and re-approved by FEMA every five years to remain eligible. This Mitigation Plan has been prepared to meet the requirements of the Act and the regulations established by FEMA.

## Funding

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Funding for the Garfield County Hazard Mitigation Plan was provided by a 75 percent HMGP grant from FEMA in April 2011, through the Oklahoma Department of Emergency Management (ODEM). The local share of 25 percent was provided by Garfield County, but the plan includes **unincorporated Garfield County; the incorporated City of Enid and the towns of Breckinridge; Carrier; Covington; Douglas; Drummond; Fairmont; Garber; Hillsdale; Hunter; Kremlin; Lahoma; North Enid; and Waukomis. In addition, the Public School Districts of Chisholm Public Schools; Cimarron Public Schools; Covington-Douglas Public Schools; Drummond Public Schools; Enid Public Schools; Garber Public Schools; Kremlin-Hillsdale Public Schools; Pioneer-Pleasant Vale Public Schools and Waukomis**

**Public Schools. Autry Technology Center** has also joined as a participant in the Garfield County Natural Hazard Mitigation Plan.

In 2011, the County received a commitment for federal grant from the Federal Emergency Management Agency (FEMA) to develop this Hazard Mitigation Plan. Subsequently, the Board of Commissioners of Garfield County contracted with Hazard Mitigation Specialists, L.L.C., a Hazard Mitigation consulting firm, to help Garfield County, the political jurisdictions, and public schools with this plan.

## **Purposes of the Plan**

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Garfield County, located in north-central Oklahoma, experiences frequent natural hazards that cause damage to property and has the potential to adversely affect local citizens.

This Plan provides a framework on which to base comprehensive mitigation planning throughout the County. Hazard identification is the process that determines which hazards may threaten Garfield County and its jurisdictions. Hazard Mitigation is the process of eliminating or reducing the effects of natural disasters that may affect Garfield County in the future largely driven by what has happened the past five years.

This plan not only provides the framework and guidance for an all-hazard approach to mitigation, it identifies hazard mitigation goals, recommended actions and initiatives that will reduce or prevent injury and damage from natural hazards. This plan points out hazard problems and measures to be implemented or continued, to alleviate the suffering and damage caused by disasters within Garfield County.

## **Scope**

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The scope of the Garfield County Natural Hazard Mitigation Plan is countywide Multi-jurisdictional Plan. This plan is all-inclusive of natural hazards that may threaten Garfield County residents or visitors. The following jurisdictions are included in the Garfield County Multi-jurisdictional Natural Hazard Mitigation Plan: **Garfield County ; the incorporated City of Enid and the towns of Breckinridge; Carrier; Covington; Douglas; Drummond; Fairmont; Garber; Hillsdale; Hunter; Kremlin; Lahoma; North Enid; and Waukomis. The Public School Districts of Chisholm Public Schools; Cimarron Public Schools; Covington-**



**Douglas Public Schools; Drummond Public Schools; Enid Public Schools; Garber Public Schools; Kremlin-Hillsdale Public Schools; Pioneer-Pleasant Vale Public Schools and Waukomis Public Schools are also participants as is the Autry Technology Center.**

To be as effective and complete as possible, the Plan has also incorporated appropriate information from the State of Oklahoma Hazard Mitigation Plan approved by FEMA in 2014. The resources of the state through the Oklahoma Climatological Survey and Oklahoma Geological Survey were found to exceed local jurisdiction resources so they were also used.

With the benefit of this Plan, the county intends to lessen its vulnerability to disasters caused by natural hazards. These actions will shape the community into a more resilient framework, able to recuperate more quickly and easily when damage does occur.

## **Community Mitigation Planning Goals**

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In order to minimize the destruction and devastation resulting from disasters, Garfield County has developed this Hazard Mitigation Plan to guide all levels of government, business, and the public in preparing for natural disasters or major events that affect the citizens in the county. In addition to the general oversight of Pre-Disaster Mitigation that will be provided by Garfield County Emergency Management and the County Commissioners, the Garfield County Hazard Mitigation Team (GCHMPT) will play a key role relative to general oversight, reviewing goals, objectives, and developing Pre-Disaster Mitigation implementation plans. The strategy in Garfield County is to utilize the mitigation programs of the Federal Government to minimize the loss of life and property to citizens and visitors in the county. Each natural hazard that is identified to apply to any portion of the county will be addressed and eliminated where possible through the implementation of the HMGP, PDM, SRL, FMA and RFC programs and grants. Additionally other grants from other sources will be utilized where possible to provide the best mitigation program possible. The approach of the strategy will be natural hazard as they relate to the county, with a specific focus on prioritizing and mitigating those hazards. This plan is intended to promote increased coordination among local officials and agencies from all levels of government and to integrate hazard mitigation management capabilities and programs. The primary goals and objectives of the Garfield County Natural Hazard Mitigation Plan are to:

**Goal 1: Protect lives and property.**

**Goal 2: Improve public awareness of threatening hazards.**

**Goal 3: Minimize effects of natural hazards on Garfield County residents.**

## Plan Point of Contact

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### **Primary:**

**Mike Honigsberg**, Enid/Garfield County Emergency Manager  
216 West Oxford  
Enid, OK 73701  
Telephone: 580-249-5969  
E-mail: [mike.honigsberg@gcem.org](mailto:mike.honigsberg@gcem.org)

### **Secondary:**

James Simunek, Garfield County Commissioner  
114 West Broadway  
Enid, OK. 73701  
Telephone: 580-237-0227  
Email: [garfieldcountycommissioners@hotmail.com](mailto:garfieldcountycommissioners@hotmail.com)

## Existing Plans / Programs

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There are various local, state, and federal agency plans along with private organizations discussed in the Garfield County Hazard Mitigation Plan which coordinate or interact with the Hazard Mitigation Plan. Below are the current plans the team has reviewed and integrated actions and changes into the Garfield County Hazard Mitigation Plan:

### **Emergency Operations Plan (EOP)**

The Emergency Operations Plans (EOP) coordinates responsibilities to designated departments, agencies, and volunteers in the event of a disaster. This plan provides information on the location of warning sirens and community shelters. It directs departments, agencies and volunteers in the procedures to best provide guidance, relief, and assistance to citizens from the effects of a disaster. This plan is written expressly for the welfare and safety of the people of Garfield County.

### **Standard Operating Procedures (SOP)**

Each major department within the county has a written operating guide that outlines day-to-day operations. The County Highway Districts, the Emergency Management and Sheriff's Departments have the most concentrated SOP's due to the nature of their operations. The departmental SOP's outline the operations and who is responsible for the various tasks during day-to-day operations. Each department affected by the Hazard Mitigation Plan will incorporate the goals and projects into their Standard Operation Plans in order to better carry out the goals established in the HM Plan.

### **Capital Improvement Plan (CIP)**

A Capital Improvement Plan is a short-range plan which identifies capital projects and equipment purchases provides a planning schedule and identifies options for financing the plan.

### **Community Development Plan**

The Community Development Plan sets out public policy in terms of transportation, utilities, land use, recreation and housing. Comprehensive plans encompass large geographical areas, a broad range of topics, and cover a long-term time horizon.

### **Comprehensive Improvement Plan**

This plan covers the entire geographic area of the district and expresses their goals and objectives. The plan lays out the vision, policies, and strategies for the future of the school, including the physical elements that will determine the districts future development.

### **Debris Management Plan –**

A comprehensive debris management plan is a critical element in efficient recovery efforts when a disaster strikes. Debris management planning activities include the following:

- Identifies the responsible debris operations managers.
- Procure standby debris removal and disposal contracts prior to the disaster. (Costs must be reasonable)
- Identify debris removal monitoring resources and staffing
- Identify potential types and quantities of debris
- Identify waste disposal methods (i.e., incineration, chipping, recycling, etc.)
- Identify and prepare debris storage and reduction sites
- Consider the proximity and effect on residential areas, educational facilities, and environmental features
- Collect baseline data.
- Determine site layout for storage, burning, grinding and other operations
- Provide buffer zones between areas within the site
- Provide ingress and egress to the site such that trucks do not delay normal traffic.
- Construct inspection towers at ingress and egress locations
- Establish an environmental remediation and site restoration plan
- Obtain appropriate Federal, State and local permits
- Implement a regular public information campaign that instructs the general public on guidelines for dealing with debris
- Ensure that costs are thoroughly documented and records are retained appropriately

### **Economic Development Plan**

The Economic Development Plan is a comprehensive policy statement summarizing the major economic issues affecting the community. It establishes the community's goals for employment expansion, community development and economic strength and identifies the means by which the community can actively reach these goals.

### **Floodplain Development Operations**

This plan outlines policies controlling development in floodplain areas. Program is intended to reduce the risks associated with new development in regulated floodplain areas.

### **Land Development Codes**

Are intended to ensure that development is of the proper type, design and location service by a proper range of public facilities and services.

**Zoning Ordinances**

Policies designating allowable land use and intensities for local areas.

## CAPABILITY ASSESSMENT SUMMARY

<b>GARFIELD CO.</b>	<i>Comprehensive Master Plan</i>	<i>Capital Improvement Plan</i>	<i>Economic Development Plan</i>	<i>Local Emergency Operations Plan</i>	<i>Continuity of Operations Plan</i>	<i>Transportation Plan</i>	<i>Stormwater Management Plan</i>	<i>Community Wildfire Protection Plan</i>	<i>Debris Mangement Plan</i>	<b>Comments</b>
<b>Planning and Regulatory Capability</b>										
BRECKENRIDGE, Town of	N	N	N	Y	N	N	N	N	N	
CARRIER, Town of	Y	N	N	Y	N	N	Y	Y	N	
COVINGTON, Town of	N	Y	Y	Y	N	N	N	Y	N	
COVINGTON-DOUGLAS PS	Y	Y	Y	Y	Y	Y	N	N	N	school transportation
DOUGLAS, Town of	N	N	N	N	N	N	N	N	N	
DRUMMOND, Town of	N	N	N	Y	N	N	N	N	N	
DRUMMOND PS	N	Y	N	Y	Y	Y	N	N	N	school transportation
ENID, City of	Y*	Y	N	Y	Y	Y	Y	N	N	*does not currently incl. haz. mit.
ENID Public Schools	Y	Y	Y	Y	Y	Y	N	N	N	school transportation
FAIRMONT, Town of	N	N	N	Y	N	N	N	Y	N	
GARBER, Town of	N	N	N	N	N	N	N	N	N	
GARBER Public Schools	Y	N	N	N	N	Y	N	N	N	
GARFIELD COUNTY	Y	Y	Y	Y	Y	Y	Y	Y	Y	
HILLSDALE, Town of	N	N	N	N	N	N	N	N	N	
KREMLIN-HILLSDALE PS	N	Y	N	Y	N	Y	N	N	N	school transportation
KREMLIN, Town of	Y	N	N	Y	N	N	N	N	N	
LAHOMA, Town of	N	N	N	N	N	N	N	N	N	
CIMARRON Public Schools	N	N	N	N	N	Y	N	N	N	
NORTH ENID, Town of	Y	N	N	Y	N	N	N	N	N	
CHISOLM Public Schools	Y	Y	N	Y	N	Y	N	N	N	school transportation
PIONEER-PLEASANTVALE PS	Y	Y	N	Y	Y	Y	N	N	N	
WAUKOMIS, Town of	Y	N*	N*	Y	Y	Y	Y	Y	N	
WAUKOMIS Public Schools	N	Y	N	N	Y	Y	N	N	N	
HILLSDALE Christian School	Y	N	N	Y	N	N	N	N	N	

### Building Codes/Permitting/Inspections

<b>Jurisdiction</b>	<i>Building Codes - Version/Year</i>	<i>Building Code Effectiveness Score</i>	<i>Fire Department ISO Rating</i>	<i>Site Plan Review Requirements</i>		<b>Comments</b>
BRECKENRIDGE, Town of	N	unk	9	N		
CARRIER, Town of	2009	unk	5	N		
COVINGTON, Town of	N	unk	5	N		
COVINGTON-DOUGLAS PS	State BC	unk	5	N		
DOUGLAS, Town of	N	unk	9-May	N		
DRUMMOND, Town of	boca 2006	unk	5	N		
DRUMMOND PS	Y	unk	5	N		
ENID, City of	IRC/IBC 2009	4 sing fm 3 other	3 cty 9 oth	Y		
ENID Public Schools	State BC	unk	3 cty 9 oth	N		
FAIRMONT, Town of	Y	unk	9	N		
GARBER, Town of	N	unk		N		
GARBER Public Schools	State BC	unk	N	N		
GARFIELD COUNTY	state BC	unk	N/A	N		
HILLSDALE, Town of	state BC	unk	5	N		
KREMLIN-HILLSDALE PS	state BC	unk	6	N		
KREMLIN, Town of	Y	unk	6	Y		codes not adequately enforced

KREMLIN-HILLSDALE PS	state BC	unk	6	N		
KREMLIN, Town of	Y	unk	6	Y		codes not adequately enforced
LAHOMA, Town of	N	unk	9	N		
CIMARRON Public Schools	State BC	unk	N	N		
NORTH ENID, Town of	Y	unk	N	Y		
CHISOLM Public Schools	2013	unk	?	N		
PIONEER-PLEASANTVALE PS	Y	unk	N	N		
WAUKOMIS, Town of	2013	unk	4/4y	Y		
WAUKOMIS Public Schools	State BC	unk		N		
HILLSDALE Christian School	1945/2001	unk	5	N		



### Land Use Planning and Ordinances

Jurisdiction	Zoning Ordinance	Subdivision Ordinance	Floodplain Ordinance	Natural Hazard Specific Ordinance	Flood Insurance Rate Maps	Aquisition of Land	Other		Comments
BRECKENRIDGE, Town of	N	N	N	N	N	N	N		
CARRIER, Town of	N	N	N	N	N	N	N		
COVINGTON, Town of	N	N	Y	N	Y	Y	N		
COVINGTON-DOUGLAS PS	N	N	N	N	N	N	N		
DOUGLAS, Town of	N	N	N	N	N	N	N		
DRUMMOND, Town of	N*	Y	Y	N	N	N	N		*working on one
DRUMMOND PS	N*	N	N	N	N	N	N		
ENID, City of	Y	Y	Y	Y	Y	Y	N		
ENID Public Schools	N	N	N	N	N	N	N		
FAIRMONT, Town of	N	N	N	N	N	N	N		
GARBER, Town of	Y	Y	Y	N	N	N	N		zoning is effective
GARBER Public Schools	N	N	N	N	N	N	N		
GARFIELD COUNTY		N	Y	N	Y	N	N		
HILLSDALE, Town of	Y	N	N	N	N	Y	N		not adequately enforced
KREMLIN-HILLSDALE PS	N	N	N	N	N	N	N		
KREMLIN, Town of	Y	N	Y	N	N	N	N		
LAHOMA, Town of	N	N	Y	N	N	N	N		
CIMARRON Public Schools	N	N	N	N	N	N	N		
NORTH ENID, Town of	Y	Y	Y	N	Y	Y	N		
CHISOLM Public Schools	N	N	N	N	N	N	N		
PIONEER-PLEASANTVALE PS	N	N	N	N	N	N	N		
WAUKOMIS, Town of	Y	Y	N	N	N	Y	N		
WAUKOMIS Public Schools	N	N	N	N	N	N	N		
HILLSDALE Christian School	N	N	N	N	N	N	N		

## Administrative and Technical

### Administration

Jurisdiction	Planning Commission	Mitigation Planning Committee	Maintenance Programs	Mutual Aid Agreements						Comments
BRECKENRIDGE, Town of	N	Y	Y	Y						
CARRIER, Town of	Y	Y	N	Y						
COVINGTON, Town of	N	Y	N	Y						
COVINGTON-DOUGLAS PS	N	Y	Y	N						
DOUGLAS, Town of	N	Y	N	Y						
DRUMMOND, Town of	N	Y	N	Y						
DRUMMOND PS	N	Y	N/A	N						
ENID, City of	Y	Y	Y	Y						
ENID Public Schools	N	Y	Y	N						
FAIRMONT, Town of	N	Y	N	Y						
GARBER, Town of	N	Y	N	Y						
GARBER Public Schools	N	Y	N	N						
GARFIELD COUNTY	Y	Y	Y	Y						
HILLSDALE, Town of	N	Y	Y	Y						coordination is effective.
KREMLIN-HILLSDALE PS	N	Y	Y	N						
KREMLIN, Town of	N	Y	Y	Y						
LAHOMA, Town of	N	Y	N	Y						
CIMARRON Public Schools	N	Y	N	N						
NORTH ENID, Town of	Y	Y	N	Y						
CHISOLM Public Schools	N	Y	Y	N						
PIONEER-PLEASANTVALE PS	N	Y	N	N						
WAUKOMIS, Town of	Y	Y	Y	Y						
WAUKOMIS Public Schools	N	Y	N	N						
HILLSDALE Christian School	N	Y	N	N						

	Chief Official(S)	Floodplain Administrator	Emergency Manager	Community Planner	Civil Engineer	GIS Coordinator	Other		Comments
BRECKENRIDGE, Town of	Y	N	N	N	N	N	N		County Emergency Manager
CARRIER, Town of	Y	N	N	N	N	N	N		
COVINGTON, Town of	Y	Y	Y	N	N	N	N		
COVINGTON-DOUGLAS PS	Y	N	N	N	N	N	N		
DOUGLAS, Town of	Y	N	N	N	N	N	N		
DRUMMOND, Town of	Y	N	Y-PT	Y*	N	N	N		town council
DRUMMOND PS	Y	N	N	N	N	N	N		
ENID, City of	Y-FT	Y-FT	Y-FT	Y-FT	Y-FT	Y-FT	N		
ENID Public Schools	Y	N	N	N	N	N	N		
FAIRMONT, Town of	Y	N	Y-PT	N	N	N	N		
GARBER, Town of	Y	N	Y-PT	N	N	N	N		
GARBER Public Schools	Y	N	N	N	N	N	N		
GARFIELD COUNTY	Y	Y	Y	N	N	Y	N		
HILLSDALE, Town of	Y	N	County	N	N	N	N		County Emergency Manager
KREMLIN-HILLSDALE PS	Y	N	N	N	N	N	N		
KREMLIN, Town of	Y	N	Y-PT	N	N	N	N		
LAHOMA, Town of	Y	N	N	N	N	N	N		
CIMARRON Public Schools	Y	N	N	N	N	N	N		
NORTH ENID, Town of	Y	Y	N	N	N	N	N		
CHISOLM Public Schools	Y	N	N	N	N	N	N		
PIONEER-PLEASANTVALE PS	Y	N	N	N	N	N	N		
WAUKOMIS, Town of	Y	N	Y	Y	N	N	N		
WAUKOMIS Public Schools	Y	N	N	N	N	N	N		
HILLSDALE Christian School	Y	N	N	N	N	N	N		

<b>Jurisdiction</b>	<i>Warning Systems</i>	<i>Hazard Data &amp; Information</i>	<i>Grant Writing</i>	<i>Hazus Analysis</i>	<i>Other</i>		<b>Comments</b>
BRECKENRIDGE, Town of		N	N	N	N		
CARRIER, Town of	Y	N	N	N	N		outdoor warning
COVINGTON, Town of	Y	N	N	N	N		
COVINGTON-DOUGLAS PS	Y	N	Y	N	N		
DOUGLAS, Town of	Y	N	N	N	N		
DRUMMOND, Town of	Y*	Y**	Y	N	N		*sirens; pre-plans
DRUMMOND PS	Y	N	Y	N	N		
ENID, City of	Y	Y	Y	N	N		
ENID Public Schools	Y	N	Y	N	N		
FAIRMONT, Town of	Y	N	N	N	N		outdoor warning
GARBER, Town of	Y	N	Y	N	N		
GARBER Public Schools	Y	N	Y	N	N		
GARFIELD COUNTY	Y	Y	Y	N	N		
HILLSDALE, Town of	Y	N	N	N	N		outdoor warning
KREMLIN-HILLSDALE PS	Y	N	Y	N	N		
KREMLIN, Town of	Y	N	N	N	N		
LAHOMA, Town of	Y	N	N	N	N		
CIMARRON Public Schools	Y	N	N	N	N		
NORTH ENID, Town of	Y	N	N	N	N		
CHISOLM Public Schools	Y	N	N	N	N		
PIONEER-PLEASANTVALE PS	Y	N	N	N	N		
WAUKOMIS, Town of	Y	Y	Y	N	N		
WAUKOMIS Public Schools	Y	N	N	N	N		
HILLSDALE Christian School	Y	N	N	N	N		outdoor bell system

## Financial

<b>Jurisdiction</b>	<b>Capital Improvement Proj. Funding</b>	<b>Authority to Levi Taxes for Spec. Purposes</b>	<b>Impact Fees for new Development</b>	<b>Storm Water Utility Fee</b>	<b>Gen. Obligation Bonds/Special Tax Bonds</b>	<b>Incur Debt thru Private Sources</b>	<b>Community Development Grants</b>	<b>Other Federal Funding Programs</b>	<b>State Funding Programs</b>	<b>Water Fees</b>	<b>Sewer Fees</b>	<b>Gas Fees</b>	<b>Electric Fees</b>
BRECKENRIDGE, Town of	N	N	N	N	N	N	N	N	N	N	N	N	N
CARRIER, Town of	N	N	N	N	N	N	N	N	N	N	N	N	N
COVINGTON, Town of	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y
COVINGTON-DOUGLAS PS	Y	Y	N	N	Y	N	N	Y	Y	N	N	N	N
DOUGLAS, Town of	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
DRUMMOND, Town of	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
DRUMMOND PS	Y	Y	N	N	N	N	N	Y	Y	N	N	N	N
ENID, City of	Y	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y
ENID Public Schools	Y	Y	N	N	Y	N	Y	Y	Y	N	N	N	N
FAIRMONT, Town of	N	N	N	N	N	N	Y	N	Y	Y	Y	Y	Y
GARBER, Town of	N	N	N	N	N	N	Y	N	N	Y	Y	Y	Y
GARBER Public Schools	Y	Y	N	N	Y	N	N	Y	Y	N	N	N	N
GARFIELD COUNTY	Y	Y	N	N	Y	N	N	Y	Y	N	N	N	N
HILLSDALE, Town of	N	Y	N	N	N	N	N	N	REAP	Y	Y	Y	N
KREMLIN-HILLSDALE PS	Y	N	N	N	Y	N	N	Y	Y	N	N	N	N
KREMLIN, Town of	N	N	N	Y	N	N	N	N	N	Y	Y	Y	Y
LAHOMA, Town of	N	N	N	N	N	N	N	N	N	N	N	N	N
CIMARRON Public Schools	N	N	N	N	N	N	N	N	N	N	N	N	N
NORTH ENID, Town of	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
CHISOLM Public Schools	Y	Y	N	N	Y	N	N	Y	Y	N	N	N	N
PIONEER-PLEASANTVALE PS	N	N	N	N	Y	N	N	Y	Y	N	N	N	N
WAUKOMIS, Town of	Y	Y	Y	N	N	N	Y	N	N	Y	Y	Y	Y
WAUKOMIS Public Schools	N	N	N	N	N	N	N	N	N	N	N	N	N
HILLSDALE Christian School	N	N	N	N	N	N	N	N	N	N	N	N	N

### Education and Outreach

<b>Jurisdiction</b>	<i>Local Citizen Groups/Non Profit Organiz</i>	<i>Ongoing Public Education/ Information</i>	<i>Natural Disaster Safety School Programs</i>	<i>Storm Ready Certification</i>	<i>Public Private Partnerships</i>	<i>Other</i>	<b>Comments</b>
BRECKENRIDGE, Town of	N	N	N	N	N	N	
CARRIER, Town of	N	N	N	N	N	N	
COVINGTON, Town of	N	Y	Y	N	N	N	
COVINGTON-DOUGLAS PS	N	N	Y	N	N	N	
DOUGLAS, Town of	N	N	N	N	N	N	
DRUMMOND, Town of	N	Y	N	N	N	N	
DRUMMOND PS	N	N	Y	N	N	N	
ENID, City of	N	Y	Y	Y	N	N	
ENID Public Schools	N	N	Y	Y*	N	N	thru county
FAIRMONT, Town of	N	Y	N	N	N	N	Certified Firewise city - have Firewise Kid Safe Programs
GARBER, Town of	N	N	Y	N	N	N	
GARBER Public Schools	N	N	Y	Y	Y	N	
GARFIELD COUNTY	Y	Y	Y	Y	Y	N	Enid is a Firewise Community
HILLSDALE, Town of	N	N	N	N	N	N	
KREMLIN-HILLSDALE PS	N	N	Y	Y	N	N	
KREMLIN, Town of	N	N	Y	Y	N	N	
LAHOMA, Town of	N	N	N	N	N	N	
CIMARRON Public Schools	N	Y	Y	N	N	N	
NORTH ENID, Town of	N	N	N	N	N	N	
CHISOLM Public Schools	N	N	Y	Y	N	N	
PIONEER-PLEASANTVALE PS	N	N	Y	Y	N	N	
WAUKOMIS, Town of	N	Y	Y	Y	Y	N	
WAUKOMIS Public Schools	N	Y	Y	N	N	N	
HILLSDALE Christian School	N	Y	Y	N	N	N	tornado and fire drills during the year



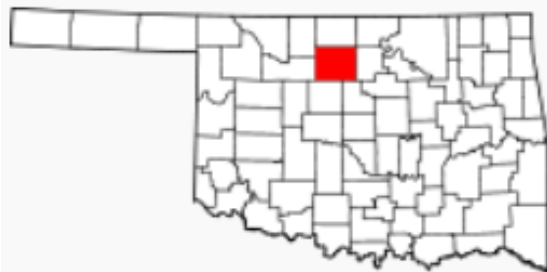
## Community Profiles

### **Garfield County** - Located in north-central

Oklahoma, Garfield County is bounded on the north by Grant County, on the east by Noble County, on the south by Logan and Kingfisher counties, and on the west by Major and Alfalfa counties. Comprised of 1,059.94 square miles of land and water, Garfield County lies within the Red

Bed Plains physiographic region. The county is drained by Black Bear, Boggy, Red Rock, Rock, Skeleton, and Turkey creeks. Named for Pres. James A. Garfield, the county is noted for its wheat production. At the turn of the twenty-first century, incorporated towns included Breckinridge, Carrier, Covington, Douglas, Drummond, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, Waukomis, North Enid, and Enid, the county seat.

### **Garfield County, Oklahoma**



In the 1700s and 1800s the Wichita, Osage, Kiowa, and other Plains Indians vied for hunting opportunities in the region. Originally part of the Cherokee Outlet, Garfield County was opened to non-Indian settlers on September 16, 1893. Many early settlers were of German and Czech descent. Prior to the opening, large cattle companies had leased large sections of the outlet from the Cherokee and cattle drives from Texas to Kansas came through the area via the Chisholm Trail. Following the opening, a number of farming communities such as Fairmont, Lahoma, and Waukomis developed. Construction of railroad lines gave impetus to other towns, including Breckinridge, Carrier, and Covington.



Congress designated Enid as the county seat and government land office site prior to the opening. Initially, county business was conducted in rented space in a two-story brick structure. In 1907, the A. O. Campbell Construction Company of Oklahoma City completed an ornate, four-story courthouse, which was destroyed by fire on January 29, 1931. The present courthouse, an Art Deco design, was constructed in 1934. As part of the Works Progress Administration Federal Art Project, artist Ruth

Augur painted historical murals on the courthouse walls.

Agriculture and livestock have been Garfield County's principal industries. Primary crops have included wheat, corn, oats, sorghum, Kaffir corn, and alfalfa. In 1907 farmers had planted 153,430 acres in wheat, 111,083 acres in corn, 36,011 in oats, and 13,467 in Kaffir. In 1930, Garfield County reported 3,478 farms, of which 47.5 percent were operated by tenants. With 710,042 acres in farmland, the average size farm was



204.2 acres. In 1930, livestock numbered 26,140 cattle, 7,149 sheep and goats, 5,657 horses, 2,799 swine, and 2,055 mules. By 1963, Garfield County had 279,200 acres planted in wheat, 55,500 acres in barley, 29,800 acres in sorghums, and 23,600 acres in oats. At that time, the livestock population stood at 71,000 cattle, 15,400 sheep, 8,500 hogs, and 2,800 milk cows. At the turn of the twenty-first century, Garfield County had 1,069 farms, with an average size of 575 acres, comprised 614,690 acres. In 2001, farmers had 305,000 acres planted in wheat and 38,000 acres in sorghum.

Because Garfield County lacked major waterways, most early transportation routes followed trails. The well-known Chisholm Trail provided access across Indian Territory for cattle drives from Texas to Kansas. In 1873, a mail route was established between Wichita, Kansas and Fort Sill, Indian Territory that passed through the Cherokee Outlet with relay stations near present Skeleton and at Buffalo Springs, near Bison. Railroad development began four years before the land opening, and Enid became a hub as the lines crisscrossed the county. In 1889, the Chicago, Kansas and Nebraska Railway (later the Chicago, Rock Island and Pacific, CRI&P) built a line from Kansas that passed through the future counties of Grant, Garfield, Kingfisher, Canadian, and Grady. In Garfield County, it connected Kremlin, Enid, Waukomis, and Bison with outside markets. In 1899, the Enid and Tonkawa Railway (later CRI&P) constructed a line between North Enid and Billings in Noble County. Passing through Breckinridge the Enid and Tonkawa Railway intersected with the Blackwell, Enid and Southwestern Railroad (later the St. Louis and San Francisco Railway) built in 1900-1901. By the early 1900s Carrier, Covington, Douglas, Drummond, Fairmont, Hillsdale, Hunter, and Lahoma had rail service.

## Community Profile – Town of Breckinridge



AREA	
Total	15.2 sq. miles
Land	15.1 sq. miles
Water	0.0 sq. miles
Elevation	1,201 feet

Located in Garfield County seven miles east of Enid, the county seat, Breckinridge is sited four miles north of U.S. Highway 64 on County Roads N2960/E0400 in Union township. When the Cherokee Outlet opened to settlement in September 1893, wheat farmers occupied the area around the future town. The Enid and Tonkawa Railway Company (sold to the Chicago, Rock Island and Pacific Railway [CRI&P] in 1900) built its line through the area from North Enid to Billings in 1899. The Blackwell, Enid and Southwestern Railroad Company (BES; after 1907, the St. Louis and San Francisco Railway) also built a branch through the area from Blackwell through Hunter and Enid to Darrow in 1900–01. The two railroads intersected at Breckinridge.

In March 1901, the Frisco Town Company platted the town. The postal designation was originally spelled Breckinridge but was changed to Breckinridge two months later.

Small-town amenities quickly developed. Rural dwellers organized a German Lutheran congregation in 1899 northwest of the future town. Later called Immanuel Lutheran Church, it moved into the new settlement, constructed a building in 1901, and maintained a private school at least through the 1930s. By 1909, some inhabitants also organized a Congregational Church. The town incorporated in 1911. By 1918, residents patronized a bank, hardware, and several general store/grocery establishments. Blackwell Milling and Elevator Company and the Randals & Grub elevator served the surrounding farmers. Breckinridge had a German band in the pre-World War I years. The *Breckinridge Times* informed the citizens in the early decades of the twentieth century.

## Community Profile – Town of Carrier



AREA	
Total	1.2 sq. miles
Land	1.2 sq. miles
Water	0.0 sq. miles
Elevation	1,352 feet

The Town of Carrier is located on State Highway 132, five miles north of its junction with U.S. Highway 60. The site is approximately seven miles due northwest of Enid, the county seat. The opening of the Cherokee Outlet in 1893 provided settlers the opportunity to file for homesteads and build up farms around future Carrier. After two years of serious crop failures, wheat became the most important cash crop.

The town grew from a dispersed rural community into a thriving town at the turn of the twentieth century. A Congregational church group had begun meeting at a local homestead in August 1894, and they completed a building in 1895, the town's first building. It also briefly served as a schoolroom. Solomon Carrier, who erected the area's first store in 1895, was appointed postmaster on May 22, 1897. The second business to open was McNeil's Blacksmith Shop. The town of Carrier was platted in August 1903 by the Northwestern Townsite Company. Carrier was laid out over several area homesteads and the

businesses and residents moved approximately one mile to the new location. The railroad was completed in 1904 (after 1907, it was the St. Louis and San Francisco Railway, or Frisco).

Social and educational offerings soon appeared. The upper floor of the Carrier General Mercantile became the schoolhouse in 1896. A town band was organized and was said to be the first one in the Cherokee Strip and entertained the citizens from 1895.

The community provided appropriate services for an agriculture-based economy: two grain elevators, two blacksmiths, a lumberyard, a bank and a hardware store. Travelers were served by a hotel and a livery stable. An oil boom in pre-World War I Garfield County provided jobs in the petroleum industry, a trend that continued through the twentieth century.

Today the population has diminished from the earlier years and many residents commute to work in nearby Enid.

### Community Profile – Town of Covington



AREA	
Total	0.4 sq. miles
Land	0.4 sq. miles
Water	0.0 sq. miles
Elevation	1,142 feet

The Garfield County town of Covington is located six miles south of U.S. Highway 64 on State Highways 74/15 approximately seventeen miles southeast of Enid, the county seat. The surrounding area was part of the Cherokee Outlet, opened by the run in 1893. The town is named for a local homesteader and townsite investor. In Otter Township, three communities were platted in adjoining quarter sections: Covington in 1903 by the Arkansas Valley Townsite Company, East Covington in 1905 by the Frisco Lot and Land Company, and West Covington in 1905 by A. F. Wolf. The three lay along the Arkansas Valley and Western Railway (after 1907 the St. Louis and San Francisco Railway) as it was constructed from Tulsa to Steen (northeast of Enid) in 1902-1903. Lots were sold in 1905 in all three places. The earliest postal designation was for Tripp, but was changed to Covington in February 1903.

During the first decade lots were traded back and forth among several promoters, and in 1914, many nonresident owners lost their lots in a tax sale. Nevertheless, the town of Covington, proper, settled down as a farming community. A rural Christian Church congregation was established in 1895, and a Lutheran congregation was established in 1896 for German farm families. By 1907 statehood the Methodists also held services.

Area residents made a living by from wheat farming, and Covington provided services. Enterprises in 1909 included two implements dealers, two lumber companies, and two livestock dealers. Two elevators operating in 1909 expanded to three by 1918. From statehood through the mid-1930s residents supported as twelve stores and shops, two hotels, and four restaurants. By the 1930s automotive garages and supply houses abounded, serving locals, farmers, and oil workers. A rural school established in the vicinity in 1901 moved to the new town. By 1936 two school buildings provided education in grades one through twelve. Covington-Douglas School District registered 304 students in 2000.

Covington made headlines in August 1926 when the notorious Kimes brothers, robbed the town's two banks on a quiet Wednesday afternoon. Their gang of four or five locked twenty-four people in a vault and demanded "just the bank's



money, not the widows' and orphans'." The crooks were captured a month later.

In 1917 an oil boom resulted in numerous wells being drilled in the Garber-Covington oil field. Through the twentieth century oil production continued to provide employment. Champlin Oil and Refining Company of Enid was an important operator. Wheat farming and agricultural services have also continued to generate jobs and income.

### Community Profile – Town of Douglas



AREA	
Total	0.2 sq. miles
Land	0.2 sq. miles
Water	0.0 sq. miles
Elevation	1,142 feet

The town of Douglas lies in Garfield County, five miles southwest of Covington and on County Road E0520, 4.5 miles due west of State Highway 74. On May 24, 1894, one-half mile east and one mile north of the later town of Douglas, a post office named Onyx was established. The site was later moved to a grocery store located approximately one-half mile south and east of the original location.

Platted by the Enid Right of Way and Townsite Company on August 25, 1902, the community was apparently named for Douglas Frantz. A railroad right-of-way had already been surveyed through the area, and a line was chartered on March 31, 1902, by Ed Peckham and the Frantz brothers as the Denver, Enid and Gulf Railroad. The first train arrived in Douglas on October 10, 1902. On February 25, 1903, the Onyx post office was moved to the new town. In 1907 the Eastern Oklahoma Railway bought the rail line and sold it that same year to the Atchison, Topeka and Santa Fe Railway. At first the railroad continued to use the name Onyx for the station, but the Oklahoma Legislature passed a special bill allowing the station to be named Douglas.

Members of the Christian Union Church of Douglas first met in May 1896 in the sod schoolhouse and then after 1901 in Liberty Chapel. In December 1902 the congregation moved to the new town. A church building erected in December 1915 burned in 1951, and a new building, completed in February 1953, continued to serve the Douglas community at the end of the twentieth century.

From 1902 to 1932 the town had a bank, the Douglas State Bank, which moved to Marshall. Douglas also had a blacksmith, a barber shop, a butcher, a café, a cream station, two doctors, a drug store, a livery stable, a hotel, a dry goods store, a millinery store, a cotton gin, and numerous residences. A Farmer's Co-Op, incorporated in 1929, also continued to serve the community. Rail service ended in 1994 because a flood had undermined the railroad bridge across the Cimarron River north of Guthrie. Passenger service ended as early as 1951.

### Community Profile – Town of Drummond



AREA	
Total	0.2 sq. miles
Land	0.2 sq. miles
Water	0.0 sq. miles
Elevation	1,224 feet



Located in southwestern Garfield County on State Highway 132, seven miles south of its junction with U.S. Highway 60, Drummond is situated about 7.5 miles due southwest of Enid, the county seat. The surrounding region opened to settlement in 1893 as part of the Cherokee Outlet, and Sheridan Township, in which Drummond developed, was soon dotted with prosperous wheat farms.

The Frisco Town Company developed Drummond, obtaining one hundred acres in 1893 and then filing a plat on July 21, 1901. This was done as the Blackwell, Enid and Southwestern Railroad (BES) built a line from Blackwell, in Kay County, through Enid and Drummond to Darrow, in Blaine County, in 1900-1901. The promoters sold lots and apparently named the town for a financial backer of the St. Louis and San Francisco Railway, the parent company of the BES. A postal designation was given in July 1901

By 1918 the town was service center. By that time, farms supported Blackwell Elevator, and Farmers Gleaner Company. The Bank financial affairs, and half a provided wares. The blacksmiths and two



becoming an active agricultural the vicinity's very productive wheat Milling and Elevator, Enid Mill and Elevator, as well as the Patent of Drummond handled residents' dozen stores of various kinds prosperous townspeople kept two automobile dealers in business.

The agricultural depression of the post-World War I years created a temporary shift from wheat to cotton farming, and one gin was constructed. However, wheat soon returned to prominence. The local economy was aided by nearby oil discoveries in the 1920s, and drilling and production activity provided some employment for years to come. Nevertheless, the number of businesses declined after World War II as residents drove to Enid to shop.

Although Drummond lies in an agricultural area and still relies on agribusiness, many residents commute to work in Enid.

## Community Profile – City of Enid



AREA	
Total	74.1 sq. miles
Land	74.0 sq. miles
Water	0.1 sq. miles
Elevation	1,240 feet

Enid, the county seat of Garfield County, is located approximately ninety miles north of Oklahoma City on U.S. Highway 81 at its intersection with U.S. Highway 412. Located on the former Chisholm Trail, the town site was born a few weeks prior to the opening of the Cherokee Outlet, popularly known as the Cherokee Strip, by land run on September 16, 1893. A post office was established on August 25, 1893. The town had one of four U.S. Land Offices located in Oklahoma Territory. On the day of the land run Enid's only permanent structure was the newly constructed land office. By sundown an estimated ten thousand people inhabited the new town.

Enid was the name first given to the Chicago, Rock Island and Pacific Railway's (CRI&P) station located three miles north of the present town of Enid. There are several versions of the origin of the town's name, but the most plausible attributes it to a CRI&P official. When visiting the construction site in the summer of 1889, he asked the name of its local station. When told it was called Skeleton Station, he proclaimed that that name would never do; nobody would want to live in a town named Skeleton. He named the station Enid after a character in Alfred Tennyson's Idylls of the King, which he had read on his trip to the area.

Enid, the rail station, was originally designated the governmental town site. It was relocated three miles south just weeks before the land run by government officials after prospective settlers protested that tribal allotments had been selected adjacent to the North Enid site. The railroad company refused to recognize the relocated town site, which was poorly situated at the confluence of Old Boggy and North Boggy creeks. By refusing to allow the train to stop at "South Enid," the company hoped the new settlers would decide to locate at "North Enid." The resulting town feud led to violence in summer 1894 when a south town mob sawed through the bridge trestle and crashed a cattle train near South Enid. To avoid conflict the U.S. Congress passed legislation forcing the railroad to schedule a stop at South Enid. The Enid railroad war ended in celebration on September 16, 1894, the first anniversary of the Cherokee Outlet land run.

After the land opening in September 1893 approximately, two thousand residents remained to begin building the town. The first three years were drought years, and Enid grew slowly. When the drought broke, the town began to prosper, its fortunes tied to the surrounding agricultural community. The town was selected as the county seat when Garfield County was initially organized as O County in 1893. The present courthouse, constructed in 1934, is listed in the National Register of Historic Places (NR 84003018).



Successful in attracting railroads Enid became a major rail hub in Oklahoma Territory by 1903. The first of these railroads was the Chicago, Kansas and Nebraska Railway (later owned by the CRI&P), which constructed a line in 1889-90 from the Kansas border to Minco in Grady County. In the early 1900s the Denver, Enid and Gulf Railroad (later the Atchison, Topeka and Santa Fe Railroad) connected Enid with Guthrie and Hillsdale. Between

1900 and 1904 St. Louis and San Francisco Railway subsidiaries gave Enid access to markets in Tulsa, Blackwell, and other towns.

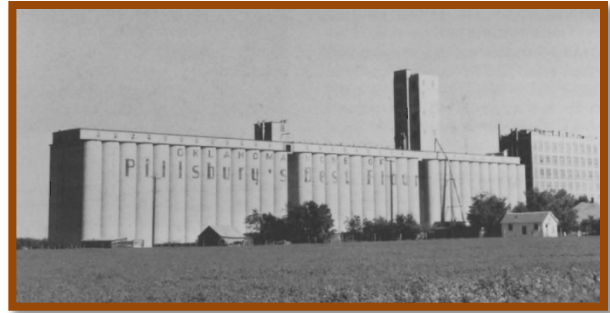
The town fathers achieved a major feat in 1906 when they convinced the Disciples of Christ denomination to locate the Oklahoma Christian College in Enid. Later renamed Phillips University, it advanced into an influential liberal arts educational institution and Bible college. The university strongly influenced Enid's cultural texture, giving birth to the Enid Symphony Orchestra and the Tri-State Band Festival, both of which continue today.

Bolstered by a decade of good weather and crop harvests, Enid and Garfield County prospered. Having established itself as a regional trade center and rail hub by 1907 statehood, the town had grown to a population of 10,087, the fourth largest in Oklahoma. Enid encompassed beautiful parks, many wholesale houses, an electric trolley system, and "over 100 automobiles." Settled predominantly by farmers from mid-western states and Kansas, Garfield County and Enid quickly developed regional characteristics. Enid became politically influential in territorial politics. Enid's Frank Frantz was the last territorial governor, appointed by a fellow Rough Rider, Pres. Theodore Roosevelt. Enid's political influence diminished after statehood.

During the next decade, Enid continued to grow as an agricultural trade center. Located in the heart of wheat country and served by a large rail hub, Enid established itself as the largest grain market in Oklahoma and one of the largest poultry markets in the United States. During this period, Garfield County also developed as a major producer of purebred livestock, and Enid was its distribution market.

The discovery of the Garber-Covington Field east of town in 1916 was Enid's next milestone. What distinguished this event from scores of other similar community oil booms was the influence of Herbert H. Champlin and his Champlin Refining Company. An early-day Enid entrepreneur and banker, he entered the oil industry at age forty-eight. Applying a banker's approach, rather than a wildcatter's approach, to the oil business, he realized that finding crude oil was only profitable long term if it could be refined and then sold. He quickly established a pipeline from the Garber and area fields to Enid, purchased a newly

built refinery to process the crude oil, and used the rail system to get his product to the mid-western retail markets. Prior to the sale of the company in 1954, Champlin Refining Company had grown to one of the nation's largest privately owned, integrated oil companies.



The Great Depression gripped Enid during the 1930s. Extremely depressed wheat and oil prices and a severe drought crippled the basic economy, but the industrial base and trade center status stayed intact. Champlin Refinery continued at near capacity, and the Pillsbury's flourmill, which had been built a few years before the economy plunged, continued to employ a core work force, albeit with low wages. George Failing patented his portable drilling rig, birthing a new industry for Enid, and cooperative marketing efforts were embraced by farmers laying the seed bed for future development of Enid's terminal grain elevator industry.

Many local businesses fell victim to the Depression, and Enid lost three banks in 1930 and 1931. Herbert H. Champlin symbolized the community's tenacity when he refused to close his First National Bank when Gov. William H. Murray ordered a statewide banking holiday in 1933. Champlin's defiance forced Murray to call out the Oklahoma National Guard to close the bank, an unprecedented action in banking history.

With the advent of World War II the U.S. Army located one of its basic flying schools at Enid. Constructed in wheat pastures south of town, the Air Corps Basic Flying School of Enid, Oklahoma, opened in November 1941. Mothballed shortly after war's end, decommissioning was fortunately delayed. When hostilities began to surface on the Korean peninsula in 1948, the military (now under U.S. Air Force command) reopened the base. In 1949 the base was renamed Vance Air Force Base. Vance Air Force Base remained in operation and at the beginning of the twenty-first century was Enid's largest employer.

The post-World War II years brought modest but steady growth to Enid. Town population grew, spurred by expanding oil and gas activity, the emergence as a major inland grain storage terminal center, and the success of the portable drilling rig manufacturing industry. Steady growth continued in the late 1970s and early 1980s as a result of Oklahoma's oil boom. In the early 1980s, Enid suffered a second economic decline with the oil bust. Farmland prices became depressed and farm credit weakened. During this period many of Enid's financial institutions were closed, including the Champlin family's First National Bank.

The 1980s brought challenging economic times. Phillips University, despite high academic ratings, encountered a severe financial crisis in 1987. Community leaders organized a creative sale/lease-back financial bailout designed to shore up the struggling university, then Enid's only higher education institution. The strategy helped Phillips survive for an additional eleven years, but it finally succumbed in the summer of 1998. Fortunately, the economic development plan initiated in 1987 allowed Enid to establish a University Center, which later evolved into a branch campus of Northwestern Oklahoma State University. Northern Oklahoma College acquired the Phillips campus in 1999 to house its Enid branch campus.

Enid's traditional trade-center role continued into the twenty-first century. The economic base has broadened to include regional medical services, food processing, light manufacturing, and financial services.

## Community Profile – Town of Fairmont



AREA	
Total	0.3 sq. miles
Land	0.3 sq. miles
Water	0.0 sq. miles
Elevation	1,201 feet

Located ten miles east-southeast of Enid in Garfield County, Fairmont is sited on County Roads N2970/E0450, approximately two miles south of U.S. Highway 64/412. The surrounding Patterson Township began to be settled in 1893 with the opening of the Cherokee Outlet. Homesteaders grew wheat, primarily as a cash crop, and garden crops to sustain their families. Inhabitants received mail at Luella from 1894.

Fairmont was platted October 18, 1902, by the Enid Right of Way and Townsite Company as the Denver, Enid and Gulf Railroad (after 1907 a property of the Atchison, Topeka and Santa Fe Railway) constructed a line through area in 1902. Town lots were sold in one day by auction and mail order bids. On the opening day, the celebration included a beer wagon and a post office in December of that year. An Enid entrepreneur immediately built a hotel and set up a lumber company. In addition, the Arkansas Valley and Western Railway constructed a branch from Tulsa through Perry and Covington to Steen (northeast of Enid) in 1902-1903 (after 1907 owned by the St. Louis and San Francisco, or Frisco Railway). The two railroads crossed at Fairmont, a hub of agricultural services. Two elevators were built along the Frisco and two along the Santa Fe. By 1909, the town's unofficial population was 100, with 648 in Patterson Township.

The petroleum industry boomed the local economy in the 1920s. The 1916 oil discovery in Garfield County led to oil drilling everywhere. Near Fairmont, a refinery was constructed before World War I, and soon it was enlarged. Fairmont Refining Company became a Champlin Refining Company property in 1925.

## Community Profile – Town of Garber

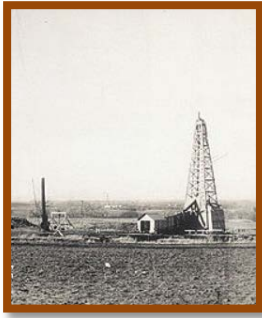


AREA	
Total	0.5 sq. miles
Land	0.5 sq. miles
Water	0.0 sq. miles
Elevation	1,178 feet

Located in Garfield County in Allison Township, Garber lies on State Highways 16/74, three miles north of their junction with U.S. Highways 64/412 and sixteen miles east of Enid. Originally part of the Cherokee Outlet, the county opened to settlement in September 1893 by land run. Homesteaders in Allison Township, surrounding Garber, began raising wheat, vegetables, and livestock. Many residents were of Bohemian (Czech) or German ancestry.

In October 1899, the Garber Town Company platted the town. A post office called McCardie had functioned near the chosen site. The Garber family moved their enterprises to the new town. The usual small-town, agriculture-oriented businesses soon appeared. By 1905 four grain elevators served the area's prosperous wheat farmers.

Petroleum development significantly affected life in Garber. Nearby, drilling began as early as 1904-05. The Garber Oil and Gas Company actually brought in a gas well in 1905. The Garber Field, one of the more important and consistent in the state, was opened in 1916 when the Hoy well came in at two hundred barrels per day. Peak production came in November 1925, and by 1940 a well in Section 18, T22N, R3W still held a state record for initial production, 27,000 barrels per day. Oil-well supply companies set up yards in town to provide tools, derricks, tanks, and other equipment. George E. Failing, inventor, established his tool and supply company in Garber in 1918. Booms happened again in 1925 and 1927, the latter continuing through the 1930s. Three refineries operated by 1929. The town grew quickly and attained status as a first-class city. The oil industry made many Garberites wealthy and continued to provide residents with employment and income, although the area's inhabitants still rely on wheat and cattle.



## Community Profile – Town of Hillsdale



AREA	
Total	0.4 sq. miles
Land	0.4 sq. miles
Water	0.0 sq. miles
Elevation	1,230 feet

Located in Garfield County in Keowee Township on County Road E3010, Hillsdale is situated approximately one mile east of State Highway 132 and fourteen miles due northwest of Enid. Originally part of the Cherokee Outlet, the surrounding region opened for settlement by land run in 1893. Hillsdale owes its creation to townsite promoters. The Denver, Enid and Gulf Railroad (part of the Atchison, Topeka and Santa Fe Railway system) built a line from Blanton Junction (northwest of Enid) through Keowee Township in 1904-1905. The railroad surveyed its route to bypass the tiny communities of Coldwater, where from 1894 stores and a post office had served the surrounding agricultural area, and an original Hillsdale, which had existed from 1900 and had a postal designation.

The Coldwater (Frisco) Townsite Company promoted and in January 1905 platted a new town 3.5 miles southeast of Coldwater and 2 miles southwest of Hillsdale. The first train arrived in February. The company ran an excursion train from Alabama and Georgia, and nearly two thousand town lots were sold on March 23, 1905. Most of "old" Coldwater's businesses, including the post office, moved to "new" Coldwater on the railroad, and Hillsdale inhabitants relocated. After some juggling of the postal designation, the name "Hillsdale" became permanent after the town incorporated on June 6, 1910.

The developing town soon included educational, religious, and commercial establishments. The first school classes convened in a sod house near town in 1900-1901. Christian and Congregational churches provided places of worship. A bank, several stores and grain dealers, an elevator, and a hotel operated by the 1920s.

Wheat farming remained the principal economic activity from the 1890s into the twenty-first century. In addition, the oil industry has intermittently provided local residents with some employment. Champlin Refining Company of Enid maintained several wells in the area in the 1930s, and the Northeast Hillsdale pool still produced as late as the 1970s. Twelve farming-and petroleum-related businesses operated in the 1990s.



## Community Profile – Town of Hunter



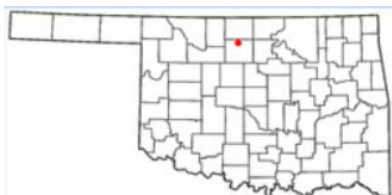
AREA	
Total	0.2 sq. mi
Land	0.2 sq. mi.
Water	0.0 sq. mi.
Elevation	1093 feet

Located in Garfield County approximately sixteen miles northeast of Enid, the county seat, Hunter is situated on County Road E0310, four miles due west of State Highway 74/15. The surrounding area was originally part of the Cherokee Outlet, opened to public settlement on September 16, 1893. Noble Township, just south of the Salt Fork of the Arkansas River and the site of future Hunter, offered fertile land attractive to farmers.

Hunter was selected as a townsite for the Blackwell, Enid and Southwestern Railroad (after 1907 the St. Louis and San Francisco Railway), which built through the area from Blackwell through Hunter and Enid to Darrow in 1900-1901. The place was named for Charles E. Hunter, the railroad's townsite manager and an Enid real estate promoter who had been in Theodore Roosevelt's Rough Riders during Spanish-American War. He chose the site in 1900, platted it in December for the Frisco Town Company, and managed the sale of lots in 1901. The town of Hunter was incorporated from 1900.

The town grew quickly, accommodating the usual variety of businesses serving local residents and a rural community. The Oklahoma Review newspaper, published in Oklahoma City, noted on September 15, 1901, that Hunter already consisted of seventy-five buildings that sheltered the Bank of Hunter, a furniture/undertaker dealer, and numerous other enterprises. The area's farms already produced enough to support four local grain elevators. A 1909 state gazetteer shows three churches, a graded public school, a bank, and a newspaper, and notes that residents had telephone connections. Other businesses included two grain dealers, three general stores, a confectioner, a milliner, and a hotel. Citizens enjoyed socializing at the Epworth League, IOOF (Odd Fellows), Knights of Pythias, and Farmers' Union. Grain and orchards provided an ongoing economic base, and the town remained a small agricultural center in the midst of a prosperous wheat-farming region. In the 1990s two elevators, a bank, a grocery, a garage, and gas station continued to operate and maintained three churches.

## Community Profile – Town of Kremlin



AREA	
Total	0.3 sq. miles
Land	0.3 sq. miles
Water	0.0 sq. miles
Elevation	1,119 feet

Located three miles south of the Grant-Garfield county line in Garfield County, Kremlin is situated two miles east of U.S. Highway 81 on County Road E0320 and on the Rock Island Railway. The center of the Chisholm Trail passes one-quarter-mile east of town. Historically called Wild Horse, the area was crossed by Chicago, Rock Island and Pacific Railway line in 1889. The Rock Island depot, built in 1894, was important to Kremlin's permanence and future growth.

The town was planned for the Cherokee Strip Opening land run in 1893 as a part of O County, which later became Garfield County. Kremlin was settled by pioneers who made the last great land run and by Russian immigrant farmers of German descent who settled in the rural area. This helps explain the

naming of the town after the Russian citadel. These Germans from Russia brought with them the Russian hard winter wheat that became the major crop grown in this region.

Kremlin was surveyed and platted as a township immediately after the opening. The post office was established November 7, 1893. Within a few years, the growing town provided retail and financial services to the nearby farming community. By 1896, the town boasted four stores, two blacksmiths, two lumber companies, and a hotel. The Kremlin Bank opened in 1900. Having a population of 221 and wanting to be incorporated, the town received a charter on May 20, 1901.

Disastrous fires in 1905, 1906, 1910, 1911, and 1930 further drove away inhabitants. At the same time, the growing popularity of automobiles led to mobility and encouraged them to work elsewhere. Construction of U.S. Highway 81 in the 1930s allowed even more freedom, and Kremlin residents began to do their shopping in Enid, a much larger town only twelve miles away. The loss of rail passenger service and increasing truck traffic eliminated the need for a depot agent, and Kremlin's depot was closed. Four highlights in Kremlin history are the addition of sidewalks in April 1908 to improve the appearance of city streets and the construction of the Kremlin Community Building, financed through shares of stock in 1929. The Great Lakes Carbon Plant, located 1.5 miles south of town, began operations in 1967.

### Community Profile – Town of Lahoma



AREA	
Total	0.3 sq. miles
Land	0.3 sq. miles
Water	0.0 sq. miles
Elevation	1,247 feet

Located in Garfield County eleven miles west of Enid on U.S. Highway 60 at its intersection with State Highway 132, Lahoma takes its name from the last three syllables of the word "Oklahoma." Founded in 1894 after the 1893 land run into the Cherokee Outlet, the town was originally sited about a mile northwest of its present location, and there a number of businesses erected buildings.

The town moved in 1901 when the Enid and Anadarko Railway (later part of the Chicago, Rock Island and Pacific system) constructed a branch line from Enid west and south to Anadarko. A "new Lahoma" townsite was surveyed in April of that year, and town lots were sold in May. Businesses and homes were moved from the original site on skids, pulled by traction steam engines. By the next year, the town supported three lumberyards, a bank, and a good number of other enterprises necessary in an agricultural service center. Farm-related industries included four grain elevators, a flourmill built in 1905, and a creamery established in 1904. The railroad connected these products to state and national markets.

Citizens did not neglect educational and religious institutions. Prosperity drove Lahoma's economy in its first decades. Unfortunately, a disastrous fire in August 1909 destroyed eight buildings, prompting the construction of more brick structures. Nevertheless, by 1918 more than two dozen businesses operated. In the 1920s regular "trade days" and an annual Community Free Fair brought nearby inhabitants to town and displayed Lahoma-area products to a larger public.

Railroad passenger service ended in 1949 and 1952 and freight service in 1979. After reaching a low of 160 in 1960, Lahoma became a "bedroom" community of people who worked in Enid. A new water system was constructed in 1962, a new school in 1967, and a new town hall in 1970. Oklahoma State University's North Central Research Station is located at Lahoma.

## Community Profile – Town of North Enid



AREA	
Total	2.3 sq. miles
Land	2.3 sq. miles
Water	0.0 sq. miles
Elevation	1,257 feet

The town of North Enid, situated in Garfield County in north-central Oklahoma, began its existence in 1889 as Enid Station on the Chicago, Rock Island and Pacific Railway right-of-way in the Cherokee Outlet. Prior to the Cherokee Outlet land opening scheduled for September 16, 1893, the location was preliminarily designated as the site for the county seat of O County (later Garfield County), but before the opening it was discovered that four Cherokee allottees had taken land at or near the site. In order to avoid legal problems, the U.S. Department of the Interior changed the county seat designation to a place approximately three miles south of Enid Station. Following the September 16, 1893, Cherokee Outlet land run the Rock Island refused to stop any of its trains at the south location. The ensuing "Enid Railroad War," over whether the railroad town or the government town would dominate, lasted until August 1894 when legal action forced the Rock Island to open a station at the south town.

During this time, North Enid was known variously as the depot town, Station of Enid, Railroad Enid, Old Enid, North Town, or North Enid, while the government town was known as Government Enid or South Enid. Despite the naming controversy the south town received a post office as Enid on August 25, 1893, and it was not until the following January 19 that a post office was established at North Enid. During a yearlong controversy between the two towns, North Enid maintained a population of approximately fifteen hundred with a two-block-long business section boasting a variety of retail establishments, but that changed dramatically when they lost the fight for area economic control.

North Enid functioned for several decades as an agricultural center in the shadow of its larger neighbor. By 1900 the town's population dwindled but the town retained two grain elevators and a grist mill as well as a school, a bank, and a church. The town remained stubbornly independent for six decades despite a population that fluctuated between 100 and 200 and despite the loss of its post office in 1923.

Between 1960 and 1970 North Enid experienced a spurt of growth as it began to develop into a "bedroom" community for an expanding city of Enid. By 2000, North Enid occupied 2.25 square miles bordered by U.S. Highway 64 on the west and State Highway 45 on the north. The Union Pacific Railway bisects the town north and south. At the end of the twentieth century, retail outlets and other amenities made the town viable. Approximately 60 percent of employed residents commuted to jobs outside the town's limits, most to Enid, and 25 percent were engaged in management or the professions.

## Community Profile – Town of Waukomis



AREA	
Total	3.1 sq. miles
Land	3.1 sq. miles
Water	0.0 sq. miles
Elevation	1,250 feet

Located in Garfield County, five miles south of Enid on U.S. Highway 81, Waukomis was founded soon after the Cherokee Outlet opened to settlement in September 1893. Waukomis Township quickly filled with wheat farmers. In 1893, a store was built in the area, and in November 1893, a postmaster was appointed. That month, the plat was filed. The settlement became known as Waukomis. Several

explanations are offered for the meaning of the word, the most interesting being that railroad officials had to "walk home" from there to Enid. Incorporation came in April 1899.

Transportation routes had always been significant in this area's history. The Chisholm Trail had passed near the east side of the future town, and four miles south lay the Buffalo Springs Stage Station. In 1889, the Chicago, Kansas and Nebraska Railway had constructed a line from Kansas through the area, generally along the cattle trail, and in 1891, the line was sold to the Chicago, Rock Island and Pacific Railway. The tracks lay on the east side of town, and a 1901 depot provided market access for local products.

As with most of Garfield County's agricultural communities, Waukomis had many businesses to serve farm families. By 1902, the town had developed a bank, two flour mill-grain elevator companies, two restaurants, a blacksmith, and a harness dealer. However, a fire in 1903 destroyed half of the buildings.

During the first few years of statehood, the community thrived. By 1909, it offered residents several churches, a graded public school, and a weekly newspaper. Telephones and electricity were also available. The number of businesses numbered forty-three, including four elevators. Two stone buildings, the first such in town, were built one being an opera house. While the number of enterprises declined by the time of World War I, agricultural services still included a flourmill, three elevators, and a creamery. Residents could keep their money in two banks and socialize through membership in the Masonic lodge and Eastern Star.

The area experienced a spurt of growth when the oil boom of the mid-to-late 1970s revived drilling in Garfield County. At the end of the twentieth century, many residents commuted to jobs in Enid, but agriculture remained the economic mainstay.

## POPULATION

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At 1907 statehood, Garfield County had 28,300 inhabitants. Numbers rose to 33,050 and 37,500 in 1910 and 1920, respectively. In 1930 and 1940 the population hovered in the mid-45,000s. During the post-World War II years, numbers increased to 52,820 and 52,975 in 1950 and 1960, respectively. Garfield County's population peaked at 62,820 in 1980. In 2000 the county had 57,813 residents. In the 2010 U.S. Census, Garfield County had 60,580 reflecting a growth of +4.786%.

**Breckinridge** Union township had attracted 675 people by 1907. Census figures were not collected for the town until 1920 when 132 residents called it home. A decline to lows of 67 and 42 in 1950 and 1960, respectively, came after World War II. The post office closed on November 22, 1963. Breckinridge rebounded in the 1970s after Farmland Industries constructed a large ammonium nitrate fertilizer plant east of Enid. The 1970 census recorded 261 inhabitants, the 2000 census, 239, and the 2010 census, 245.

**Carrier's** population was not officially counted until 1980, but state gazetteers in 1909 and 1918 credit it with 200 and 350 inhabitants, respectively. The surrounding Hobart Township had tallied 589 occupants in 1900, a number that rose to 718 by 1910. Carrier's 1980 population of 259 had declined to 77 by the year 2000. Population in 2010 was 85.

**Covington** By 1907 the place sheltered 133 residents and by 1910, 183. Population peaked at 1,283 in 1920, in 1930 dropped to 927, and from 1940 through 1990 hovered between 600 and 800. The 2000 census recorded 553 souls. Population in 2010 was 527.

**Douglas** Although the population never exceeded 195 (1920), by 2000 population stood at thirty-two and the 2010 population remained at 32.

**Drummond** By 1900 the township had a population of 637 and at 1907 statehood, 709. A 1909 population of approximately 300 grew to about 350 by 1918. Drummond's first official census, taken in 1920 after the town incorporated, tallied 292, a number that remained steady through the 1960s. By 1970, 326 people lived there, and the population peaked at 482 in 1980, the growth due to a recent oil boom. The 2000 census counted 405 inhabitants. By the 2010 census Drummond's population had grown to 455 residents.

**Enid** By 1907 statehood, the town had grown to a population of 10,087, one of the largest in the state. Its population grew to 16,576 by 1920. Town population grew to 38,859 by 1960. The city's 2000 population stood at 47,045. The 2010 census figure was 49,379.

**Fairmont** The Township had 546 residents in 1900. By 1909, the town's unofficial population was 100. The U.S. Census recorded 166 residents in 1920, a number that remained steady through World War II. The 1980 census recorded 419; the 1990 population had dropped to 129, but grew by the 2000 census, 147 dropping to 134 by 2010.

**Garber** By 1920 the boom had grown Garber to an unofficial population count of 2,200 (the U.S. Census registered 1,446). The peak 1920 population declined slowly over the next half-century but climbed from a low of 905 in 1960 to 1,011 in 1970, due to oil exploration. The 2000 census recorded 845 inhabitants. The census in 2010 was 822.

**Hillsdale** By 1910, 226 people lived in Coldwater/Hillsdale. The population of 209 in 1920, dropped to a low of 60 in 1960, and rebounded slightly, remaining at 101 residents by 2000. The 2010 census indicated a growth to 121.

**Hunter** Hunter's population at 1907 statehood stood at 254 and grew until the 1920s. It peaked in 1920 at 443. Despite a minor oil boom in the 1930s in the Hunter Field, the Great Depression took a toll, and from the 1930s through 1950s the number declined to 203 in 1960. A resurgence brought a peak of 276 in 1980. The 2000 population stood at 173, about fifty families, and many residents commuted to work in Enid and other towns. The population in the 2010 census was 165.

**Kremlin** Having a population of 221 in 1901 the population at 1907 statehood was 273, decreasing to 253 in 1910 largely due to major fires in the town. Kremlin's population fluctuated over the twentieth century, declining from 253 in 1910 to a low of 124 in 1930. Between 1970 and 1980, however, it rose to a peak of 301. The 1990 census recorded 243 residents, and the 2000 census, 240. By 2010 the population grew to 255.

**Lahoma** The inhabitants numbered 273 at 1907 statehood and remained near that number for two more decades. The Great Depression and World War II, however, caused a population drain, and by 1950, the count had dropped to 190. The census recorded 645 in 1990 and 577 in 2000 but grew to 611 by 2010.

**North Enid** In 1900, the town had a population of only 205. By 1918 it had declined by nearly half. The 1960 population of 286 exploded to 730 ten years later and to 992 in 1980. The 2000 U.S. Census counted a population of 796 and 860 by 2010..

**Waukomis** By 1900, 688 people lived there. By 1907 statehood, 570 inhabitants lived and worked there. Waukomis slowly declined in population over the decades. A 1910 count of 533 slipped to 397 in 1940 as drought, the Great Depression, and World War II forced residents to larger cities. In 1970, the town had 842 inhabitants. Waukomis peaked again at 1,551 in 1980 but dropped to 1,261 in the 2000 census. The 2010 population was 1286 making it the largest town next to Enid in the county.



## Government

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Garfield County government generally performs state mandated duties which include assessment of property, record keeping (e.g., property and vital statistics). Other major programs performed by the county are the maintenance of rural roads, administration of elections, county law enforcement/jail administration, judicial functions, and relief for the poor. Today counties are also rapidly moving into other public services such as undertaking programs relating to child welfare, consumer protection, economic development, employment training, planning and zoning, and water quality, to name a few.

Garfield County, like most counties, considers construction/maintaining county roads one of their primary programs.

Counties are a subdivision of state government. The powers it exercises are primarily delegated by the State as a quasi-municipal corporation.

Each County is divided into three districts, as equal in population as possible and numbered 1, 2, and 3 respectively. One Commissioner is elected from each district. District boundaries are set every 10 years following the federal census. Oklahoma County Commissioners are required to fulfill the needs of their District with taxpayer funds provided, each year, in a Highway Cash Account and a Highway Levy Account. A County Commissioner is a Constitutional Officer, who must fulfill his or her Constitutional and Statutory duties

All of the county officials are elected to staggered four-year terms except for the Election Board Secretary who is appointed by the local state senator. Counties are made up of the following elected officials:

### District 1, 2, and 3 County Commissioners

- County Clerk - Functions as the custodian of records for the county, acts as registrar of deeds, and acts as the county's purchasing agent.
- County Court Clerk - Maintains all proceedings of the Court of Record in the county.
- County Assessor - Have the duty and responsibility to determine the true worth of real and personal property for the purpose of taxation.
- County Treasurer - Acts as the tax collector and banker for the county.
- County Sheriff - Preserves the peace and protects life and property and suppress' all unlawful disturbances.

## Oklahoma Statutes Citationized

### Title 19. Counties and County Officers

#### Chapter 1 - Status and Power of Counties

#### Section 3 - County's Powers Exercised by Board of Commissioners - Certain Contracts Void by Individual Commissioner

Cite as: O.S. §, \_\_ \_\_

The powers of a county as a body politic and corporate shall be exercised by its board of county commissioners.

It is hereby declared to be contrary to law, and against public policy, for any individual county commissioner, or commissioners, when not acting as a board, to enter into any contract, or to attempt to enter into any contract, as to any of the following matters:

- (a) Any purchase of equipment, machinery, supplies or materials of any kind for any county or any commissioner's district, or districts, thereof;
- (b) Any contract or agreement relating to or for the leasing or rental of any equipment, machinery, supplies or materials for any county or any commissioner's district, or districts, thereof;
- (c) To do or transact any business relating to such county, or any commissioner's district, or districts thereof, or to make any contract or agreement of any kind relating to the business of such county, or any commissioner's district, or districts thereof;

And none of such acts or attempted contracts as above set forth, done or attempted to be done, by an individual county commissioner or commissioners, when not acting as a board, shall ever be subject to ratification by the board of county commissioners, but shall be illegal, unlawful and wholly void.

Provided that nothing herein shall be construed as prohibiting or preventing the chairman of the board of county commissioners from performing such duty or duties as he may be required by law to perform as chairman of such board, but only after the board, by a majority vote thereof, shall have authorized and directed such performance by said chairman.

## **MUNICIPAL GOVERNMENT**

A **municipality** is used to mean the governing body of a municipality. A municipality is a general-purpose administrative subdivision, as opposed to a special-purpose district. In Oklahoma, there are several forms of government within municipal government. The forms of government for each jurisdiction are identified following:

Under Oklahoma law, municipalities are divided into two categories: cities, defined as having more than 1,000 residents, and towns, with fewer than 1,000 residents. Both have legislative, judicial, and public power within their boundaries, but cities can choose between a mayor-council, council-manager, or strong mayor form of government, while towns operate through an elected officer system.

## Oklahoma Statutes Citationized

### Title 11. Cities and Towns

#### Chapter 1 - Oklahoma Municipal Code

##### Article I - General Provisions and Definitions

1. "Charter municipality" or "Municipality governed by charter" means any municipality which has adopted a charter in accordance with the provisions of the Constitution and laws of Oklahoma and at the time of adoption of the charter had a population of two thousand (2,000) or more. Once a municipal charter has been adopted and approved, it becomes the organic law of the municipality in all matters pertaining to the local government of the municipality and prevails over state law on matters relating to purely municipal concerns;

2. "City" means a municipality which has incorporated as a city in accordance with the laws of this state;

13. "Town" means a municipality which has incorporated as a town in accordance with the laws of Oklahoma.

#### **Section 22-101 - Corporate Powers of Municipalities**

*All incorporated municipalities shall be bodies corporate and politic, and shall have the powers to:*

1. Sue and be sued;
2. Purchase and hold real and personal property for the use of the municipality;
3. Sell and convey any real or personal property owned by the municipality and make orders respecting the same as may be conducive to the best interests of the municipality;
4. Make all contracts and do all other acts in relation to the property and affairs of the municipality, necessary to the good government of the municipality, and to the exercise of its corporate and administrative powers; and
5. Exercise such other powers as are or may be conferred by law.

## Statutory Town Board of Trustees

## Oklahoma Statutes Citationized

### Title 11. Cities and Towns

#### Chapter 1 - Oklahoma Municipal Code

##### Article XII - Statutory Town Board of Trustees Form of Government

##### Section 12-102 - Governing Body - Board of Trustees

The town board of trustees shall consist of either three (3) or five (5) trustees who shall be nominated from wards or at large and elected at large. The governing body may submit to the voters the question of whether the town board shall consist of either three (3) or five (5) trustees. If approved, the election of trustees to fill any new positions shall take place at the time set by the town board but no later than the next regular municipal election. The terms of the new trustees shall be staggered as provided for in Sections 16-205 and 16-206 of this title.

The Town of Breckinridge

The Town of Carrier

The Town of Covington






The Town of Douglas

The Town of Drummond

**The Town of Fairmont**  
**The Town of Hillsdale**  
**The Town of Kremlin**  
**The Town of Lahoma**  
**The Town of North Enid**  
**The Town of Waukomis**

Towns governed under the statutory town board of trustees form have all the powers, functions, rights, privileges, franchises and immunities granted, or which may be granted, to towns. Such powers shall be exercised as provided by law applicable to towns under the town board of trustees form, or if the manner is not thus prescribed, then in such manner as the board of trustees may prescribe.

### **Statutory Aldermanic Form of Government**

 **Oklahoma Statutes Citationized**  
 **Title 11. Cities and Towns**  
 **Chapter 1 – Oklahoma Municipal Code**  
 **Article Article IX – Aldermanic Form of Government**  
 **Section 9-101 – Statutory Aldermanic Form of Government**

Cite as: O.S. §, \_\_ \_\_

The form of government provided by Sections 11-9-101 through 11-9-118 of this title shall be known as the statutory aldermanic form of city government. Cities governed under the statutory aldermanic form shall have all the powers, functions, rights, privileges, franchises and immunities granted, or which may be granted, to cities. Such powers shall be exercised as provided by law applicable to cities under the aldermanic form, or if the manner is not thus prescribed, then in such manner as the governing body may prescribe.

### **Town of Garber**

In an aldermanic or weak mayor-council structure, the city is governed by an elected at-large mayor and two councilmembers from each ward, forming the city council. The mayor serves as the presiding officer of the council and the head of state and head of government of the city, but does not vote on the council, unless to break a tie vote. The council also elects a council president that can act in the mayor's absence. As the chief executive officer of the city government, the mayor appoints city officers with the council's oversight and can remove, suspend and directly oversee city officers and employees. He or she prepares an annual budget and submits it to the council, advises the council on the city's finances and future needs, makes recommendations, enforces city ordinances, and maintains the public peace. The council is responsible for enacting municipal legislation, revenue and spending decisions, and creating or abolishing city divisions.

## Statutory Council-Manager

### **Oklahoma Statutes Citationized**

#### **Title 11. Cities and Towns**

##### **Chapter 1 - Oklahoma Municipal Code**

##### **Article X - Council-Manager Form of City Government**

##### **Section 10-101 - Statutory Council-Manager Form of Government**

The form of government provided by Sections 11-10-101 through 11-10-121 of this title shall be known as the statutory council-manager form of city government. Cities governed under the statutory council-manager form shall have all the powers, functions, rights, privileges, franchises and immunities granted, or which may be granted, to cities. Such powers shall be exercised as provided by law applicable to cities under the statutory council-manager form, or if the manner is not thus prescribed, then in such manner as the council may prescribe.

### **The City of Enid**

In a Council-Manager form of government, the City Council consists of a Mayor, who is elected at-large, with an appropriate number of elected council members, to serve the political wards (districts) in the City. He has no regular administrative duties other than in signing written obligations of the City as the Council may require.

The City Manager is the chief executive administrative officer for the City of Enid and is appointed by and reports directly to the City Council. The City Manager supervises all of the city's departments, prepares the annual budget, and performs such activities as directed by the council. Lastly, the city manager has the power to appoint, and when necessary for the good of the service, remove, demote, lay off or suspend all heads of administrative departments and other administrative officers and employees of the city except as otherwise provided by law.

## **ECONOMICS AND TRANSPORTATION**

Virtually all of the communities in Garfield County depend greatly on agriculture for the economy. In addition to agriculture, the county's economy has been also boosted by various industries such as oil and gas, manufacturing, flour milling, Vance Air Force Base, and Northrop Worldwide Air Services. In the 1910s and 1920s prominent oil and gas fields included the Garber-Covington, the Barnes, and the Sarah Whipple. In 1946 the Ringwood Field, west of Enid, developed. The Champlin Refining Company was headquartered in Enid. Enid has served as a principal grain storage terminal and flour-milling center. Early-day businesses included the Alton broom factory and the D. C. Bass and Sons Construction Company, both located in Enid. In August 1998 Advance Foods Company hired an additional 565 employees, making it Enid's



largest nonmilitary employer. City amenities include Leonardo's Discovery Warehouse, Enid Symphony Hall, Railroad Museum of Oklahoma, David Allen Memorial Ballpark, Southern Heights Heritage Center, Government Springs Park, and the Cherokee Strip Regional Heritage Center.

Motorists and commercial transporters have the use of a number of highways as well as numerous miles of county roads.

## Major highways

- 60 U.S. Highway 60
- 64/412 U.S. Highway 64/U.S. Highway 412
- 81 U.S. Highway 81
- 15 State Highway 15
- 45 State Highway 45
- 74 State Highway 74

Interstate 35, a major north-south cross-county highway is located approximately 30 miles east of Enid with US Highways 64/412 providing easy access to Garfield County from the interstate for commercial traffic.



## Academia

After the 1893 land opening settlers soon established schools and other educational facilities. In September 1894 the Enid Business College was established. Students learned penmanship, typewriting, shorthand, telegraphy, and bookkeeping as well as spelling and arithmetic. The institution continued to operate until the mid-1970s. In September 1907 county residents and others could obtain a higher education when the Oklahoma Christian University (later named Phillips University) opened. *(Phillips University is not a participant in this plan and is only mentioned due to educational historical significance.)*

**The Public School Districts of Chisholm Public Schools; Covington-Douglas Public Schools; Drummond Public Schools; Enid Public Schools; Garber Public Schools; Kremlin-Hillsdale Public Schools; Cimarron Public Schools; Pioneer-Pleasant Vale Public**

**Schools and Waukomis Public Schools are participants in this plan as is the Autry Technology Center.**

## Garfield County



**Chisholm Public School District:** provides education for students in northwestern Garfield County in the rural area north-west of Enid. The schools are managed by the Chisholm School District. Enrollment figures are the latest available from the Oklahoma Department of Education.

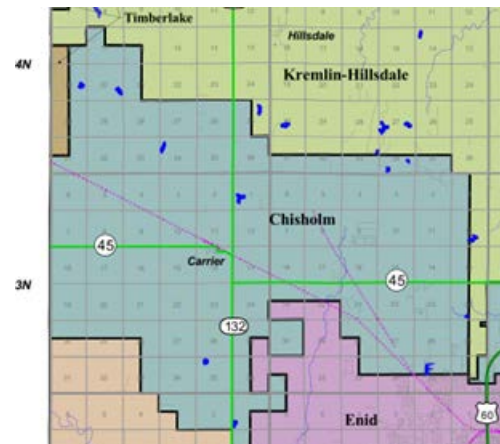


**Chisholm Elementary School**

**Chisholm Elementary School**  
Enrollment 325 grades PreK – 5  
Certified Staff = 22

**Chisholm Middle School**  
Enrollment 220 grades 6-8<sup>th</sup>  
Certified Staff = 17

**Chisholm High School**  
Enrollment 245 grades 9-12<sup>th</sup>  
Certified Staff = 22



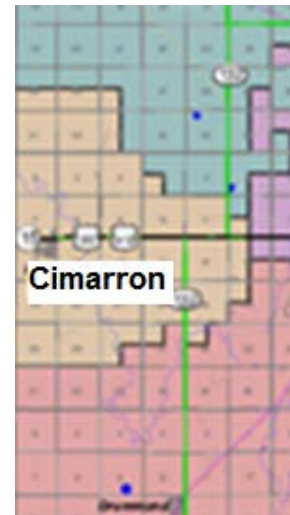
**Mid High/High Schools**

**Cimarron Public School District:** provides education for students in rural west central Garfield County around the community of Lahoma. The schools are managed by the Cimarron School District. Enrollment figures are the latest available from the Oklahoma Department of Education.

Part of this district is in Major County but participated in Garfield County meetings.



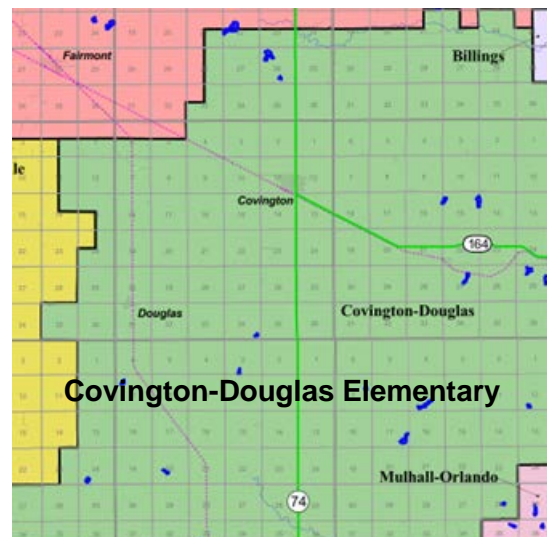
**CIMARRON ELEMENTARY/HIGH SCHOOL**  
**Grades PK-12 Enrollment = 280**  
**Certified Staff = 20**



**Covington-Douglas Public School District:** provides education opportunities for public school students in rural southeastern Garfield County. The schools are managed by the Covington-Douglas School District. Enrollment figures are the latest available from the Oklahoma Department of Education.



**Covinton-Douglas Elementary/High School**  
**Grades PK-12 Enrollment = 286**  
**Certified Staff = 27**



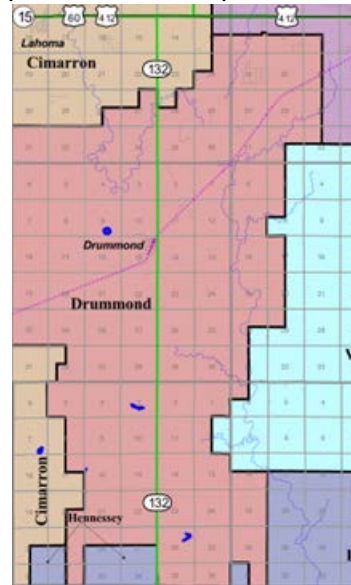


**(Douglas** Area children first attended school in a sod house in 1896. A frame building was erected in summer 1901. With the growth of Douglas, parents decided to move the school to town. It took three elections to get the required number of voters. In summer 1903, the building was moved and another room added. In 1911, a brick structure with four large classrooms, two halls, a library, and a basement was built. High school classes were first offered in 1916 and continued until the 1961 consolidation of the school with that of Covington. The consolidated district took the Douglas's district number, number 94. During the late 1970s, the school building served as a residential school and treatment center for children aged fourteen and under.)

**Drummond Public Schools:** provides education opportunities for public school

students in rural southwestern Garfield County. The schools are managed by the Drummond School District. Enrollment figures

are the latest available from the Oklahoma Department of Education.



**DRUMMOND ELEMENTARY/HIGH SCHOOL**  
**Grades PK-12 Enrollment = 331**  
**Certified Staff = 24**

**Enid Public School District:** provides education opportunities for public school students in central and west central Garfield County. The schools are managed by the Enid School District. Enrollment figures are the latest available from the Oklahoma Department of Education.

**ELEMENTARY:**



**ADAMS ELEMENTARY**  
**Grades PK-5 = 325**  
**Certified Staff = 22**



**COOLIDGE ELEMENTARY**  
**Grades PK-5 = 516**  
**Certified Staff = 35**



**EISENHOWER ELEMENTARY**  
**Grades PK-5 = 153**  
**Certified Staff = 10**



**GARFIELD ELEMENTARY**  
**Grades PK-5 = 422**  
**Certified Staff = 23**



**GLENWOOD ELEMENTARY**  
**Grades PK-5 = 530**  
**Certified Staff = 31**



**HAYES ELEMENTARY**  
**Grades PK-5 = 354**  
**Certified Staff = 19**



**HOOVER ELEMENTARY**  
**Grades PK-5 = 359**  
**Certified Staff = 28**



**MCKINLEY ELEMENTARY**  
**Grades PK-5 = 375**  
**Certified Staff = 24**



**MONROE ELEMENTARY**  
**Grades PK-5 = 482**  
**Certified Staff = 32**



**TAFT ELEMENTARY**  
**Grades PK-5 = 357**  
**Certified Staff = 22**

#### **MIDDLE SCHOOLS:**



**DEWITT-WALLER MIDDLE SCH.**  
**Grades 6-8 = 576**  
**Certified Staff = 43**



**EMERSON MIDDLE SCH.**  
**Grades 6-8 = 481**  
**Certified Staff = 34**



**LONGFELLOW MIDDLE SCH.**  
**Grades 6-8 = 393**  
**Certified Staff = 30**

**HIGH SCHOOL:**

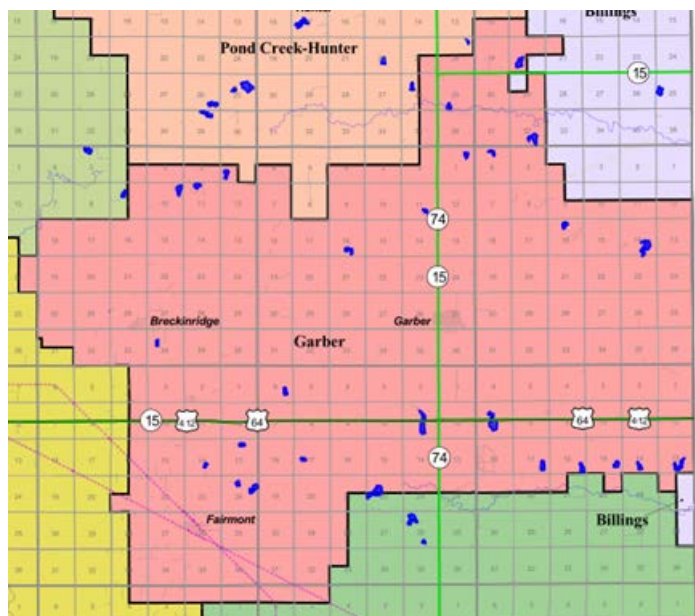


**ENID HIGH SCHOOL**  
**Grades 9-12 = 1702**  
**Certified Staff = 95**

**Garber Public School District:** provides education opportunities for public school students in rural east central Garfield County. The schools are managed by the Garber School District. Enrollment figures are the latest available from the Oklahoma Department of Education.



**Garber Elementary School**  
**Grades PK – 8 Enrollment = 231**  
**Certified Staff = 15**

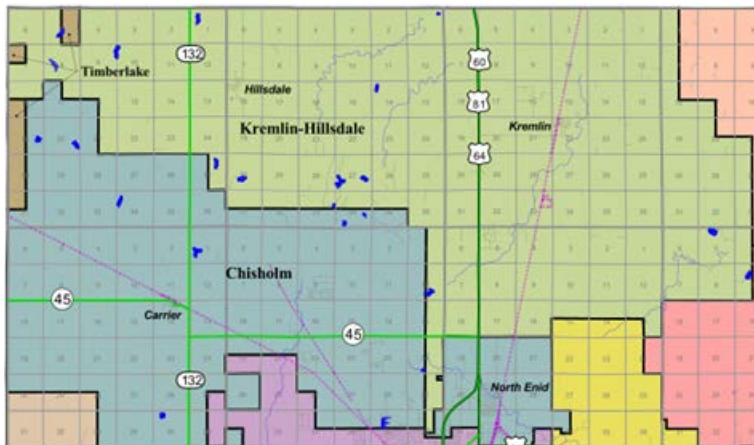






**GARBER HIGH SCHOOL**  
**Grades 9-12 Enrollment = 107**  
**Certified Staff = 15**

**Kremlin-Hillsdale Public School District:** provides education opportunities for public school students in rural central and south-central Garfield County. The schools are managed by the Chisholm School District. Enrollment figures are the latest available from the Oklahoma Department of Education.



**Kremlin-Hillsdale Elementary**



**Kremlin – Hillsdale High School**  
**Grades 9-12 Enrollment = 75**  
**Certified Staff = 10**

### Kremlin

A six-room, brick schoolhouse built in 1931-32 graduated its first high school class in 1933

Hillsdale The first school classes convened in a sod house near town in 1900-1901. An eight-room, brick schoolhouse, constructed approximately a decade later when area schools consolidated, was destroyed by fire in 1940. The Works Progress Administration built a new one in that year.

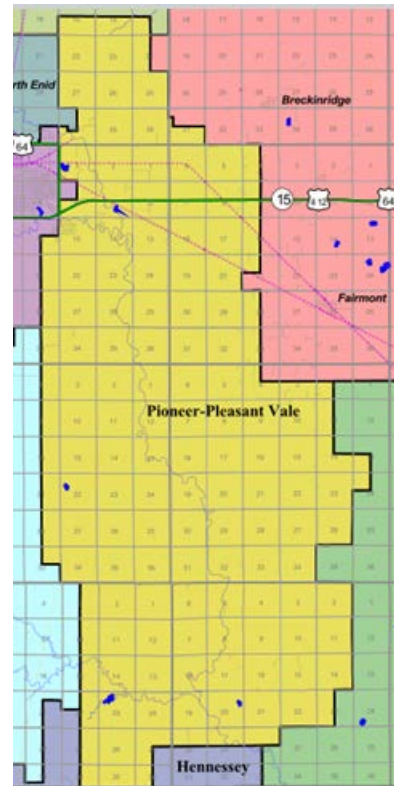
**Pioneer-Pleasant Vale School District:** provides education opportunities for public school students in rural central and south-central Garfield County. The schools are managed by the Chisholm School District. Enrollment figures are the latest available from the Oklahoma Department of Education.



**Pleasant Vale Elementary**  
**Grades PK – 6<sup>th</sup> Enrollment = 325**  
**Certified Staff = 21**



**Pioneer Jr. High/High School**  
**Grades PK – 6<sup>th</sup> Enrollment = 325**  
**Certified Staff = 21**

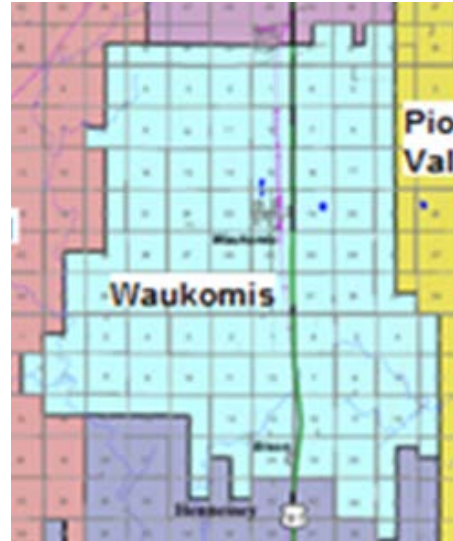




**Waukomis Public School District:** provides education opportunities for public school students in rural central and south-central Garfield County. The schools are managed by the Chisholm School District. Enrollment figures are the latest available from the Oklahoma Department of Education.



**WAUKOMIS ELEMENTARY/MIDDLE SCHOOL**  
**Grades PK-8 Enrollment = 254**  
**Certified Staff = 14**



**WAUKOMIS HIGH SCHOOL**  
**Grades 9-12 Enrollment = 87**  
**Certified Staff = 12**

**Autry Technology Center –** Autry Technology Center began serving students in 1967, as one of the five original vocational-technical schools in Oklahoma. Autry is part of a nationally acclaimed system of 29 technology centers with 54 campuses statewide. Autry has grown to

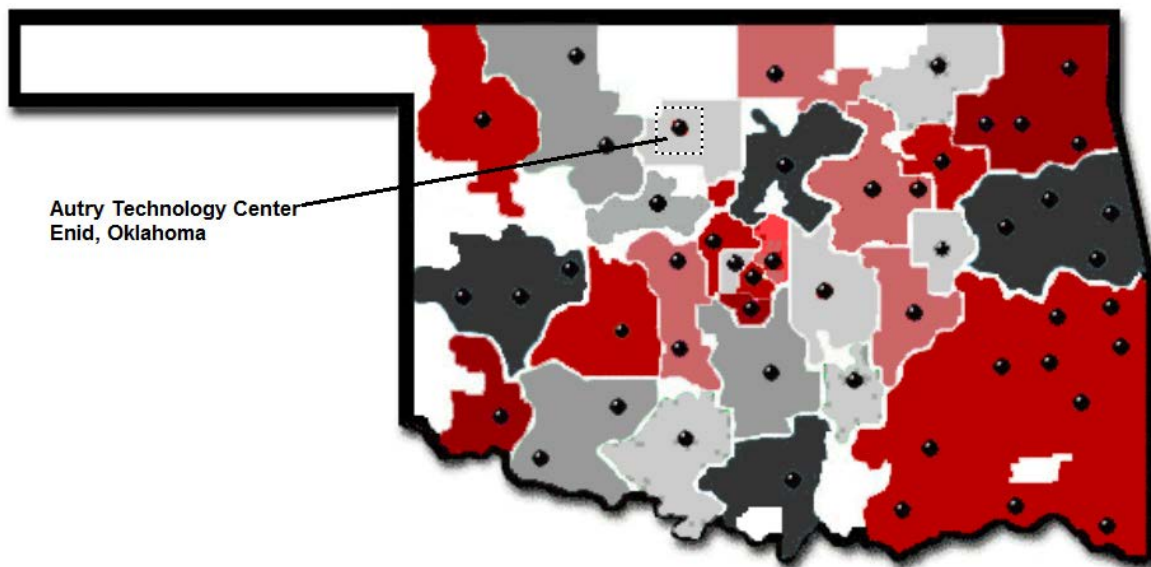
serve over 10,000 individuals annually by providing programs and services that enhance skill development and job opportunities.

### PROGRAMS AND SERVICES

Autry provides a wide range of opportunities to upgrade career and technical skills or learn new ones. Autry Technology Center is accredited by the Oklahoma Department of Career and Technology Education and the Oklahoma Department of Education.

**421**  
Adult students

**347**  
High School students



## Climate

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Garfield County is part of the Central Great Plains, a region that was once grasslands and has since become some of the best agricultural land in Oklahoma. Average annual precipitation ranges from about 32 inches in western Garfield County to nearly 36 inches in the east. May and June are the wettest months, on average, and winters tend to be quite dry. Enid holds the statewide record for the greatest daily rainfall, a total of 15.68 inches on October 11, 1973. Most winters have at least one inch of snow, with almost half having ten or more inches.

Temperatures average between 58 and 59 degrees across the county. Temperatures range from an average daytime high of 95 degrees in July to an average low of 25 degrees in January. Garfield County averages a growing season of 210 days, but plants that can withstand short periods of colder temperatures may have an additional nearly six weeks.

Winds from the south are quite dominant, averaging almost eleven miles-per-hour. Relative humidity, on average, ranges from 46% to 89% during the day, with a decrease during the summer. Winter months tend to be cloudier than summer months. The percentage of possible sunshine ranges from an average of slightly under 60% in winter to nearly 80% in summer.

Thunderstorms occur on about 51 days each year, predominantly in the spring and summer. During the period 1950 - 2003, Garfield County recorded 59 tornadoes. The most recent significant tornado (F2 intensity or greater) occurred on May 3, 1999, part of the biggest single-day outbreak in Oklahoma history. Garfield County was the starting point for an F4 tornado that cut a 66-mile path across Garfield, Noble, and Osage Counties on April 26, 1991. Despite the large number of strong tornadoes in Garfield County, there has been only one recorded fatality. Typically, there are about 4 events each year of hail exceeding one inch in diameter, although many storms cover large areas. As information collection improves, both the number of reported tornadoes and the number of severe hail events have increased.

## References

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Wikipedia.com

Encyclopedia of Oklahoma History and Culture - <http://digital.library.okstate.edu/encyclopedia/entries/A/alist.html>

Oklahoma Climatological Survey - <http://climate.mesonet.org/>

Oklahoma Department of Agriculture - [www.oda.state.ok.us/](http://www.oda.state.ok.us/)

Oklahoma Department of Education - <http://www.sde.state.ok.us/>

## **CHAPTER TWO**

### **The Planning Process**

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Hazard mitigation planning is the process of determining how to reduce or eliminate the loss of life and property damage resulting from natural hazards. The primary purpose of hazard mitigation planning is to identify community policies, actions and tools for implementation over the long term that will result in a reduction of risk and potential for future losses community-wide. This is accomplished by using a systematic process of learning about the hazards that can affect the community, setting clear goals, identifying appropriate actions, following through with an effective mitigation strategy, and keeping the plan current. The ten-step process as outlined in the FEMA 386 series publications How to Guides was followed in the process of developing the Garfield County Hazard Mitigation Plan.

#### **Phase 1** – Organize resources

- Step 1** – Coordinate/involve all agencies and jurisdictions that want to participate
- Step 2** – Involve the public
- Step 3** – Organize to prepare the plan

#### **Phase 2** – Assess the Risks

- Step 4** – Assess what the natural hazards are
- Step 5** – Assess the problem

#### **Phase 3** – Develop the Mitigation Plan

- Step 6** – Develop list of goals
- Step 7** – Develop list of mitigation actions.
- Step 8** – Draft an action plan

#### **Phase 4** – Implement and Monitor progress

- Step 9** – Adopt the Plan
- Step 10** – Implement, evaluate and revise the plan

### **Garfield County Hazard Mitigation Planning Team Formation**

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Notices designed to encourage interest from the public were printed and posted as required for open meetings during the process. Invitation letters were sent to potential participants, a copy of which is in Appendix A. The Garfield County Hazard Mitigation Planning Team was formed to provide guidance during the development of this plan. The team was comprised of representatives from local governments, county government, state government, public schools, and local businesses. The Garfield County Hazard Mitigation Planning Team (GCHMPT) was formed during the first meeting. Public meetings of the GCHMPT were held and a great amount of information on hazard risk and critical facilities was derived from participants during those

meetings and incorporated into the plan where applicable. No interest was shown or participation from the general public.

They were in agreement with the reviews presented in the review process, reviewing all major components that had been brought together at previous meetings. The major components reviewed at the meeting after they were originally developed were: purpose of hazard mitigation plans; goals; identified hazards; assessments; critical facilities; projects and prioritization and implementation responsibilities.

Table 2-1 lists the Garfield County Hazard Mitigation Planning Team members, their affiliation and their positions in the community. The listing given here indicates the planning team member identified by each jurisdiction to represent them on the team. See **Appendix A** for meeting minutes and contributions by all participants including the planning team members.

**NOTE: Some members listed in the planning team may no longer be involved due to various reasons such as retirement, transfer, moving, etc. Their replacement is not listed because they did not participate at the time the plan meetings were occurring.**

<b>Table 2-1 GARFIELD COUNTY HAZARD MITIGATION PLANNING TEAM</b>		
<b>Name</b>	<b>Affiliation</b>	<b>Position</b>
<b>Mike Honigsberg - Chairman</b>	Enid/Garfield Co. North Enid	Emergency Manager
Marc Bolz	Garfield County District # 1 Town of Covington	Commissioner
Mike Postier	Garfield County District # 2	Commissioner
James Simunek	Garfield County District # 3	Commissioner
Kathy Hughes	Garfield County	County Clerk
Ryan Singleton	Enid/Garfield County 911	Lieutenant
Kevin Morris	Enid Police Department	Captain
Shawn Hime	Enid Public Schools	Superintendent
Amber Fitzgerald	Enid Public Schools	Communications Director
Corbin Baker	Enid Fire Department	Training Officer
Darren Sharp	Covington-Douglas Public Schools	Superintendent
Dale Bledsoe	Waukomis Public Schools	Superintendent
Mason Hornberger	Waukomis Fire Department	Firefighter/EMT
Robert Sprage	Waukomis Fire Department	Firefighter
Clarence Maly	Waukomis Fire Department	Chief
Steve Walker	Cimarron Public Schools	Superintendent
Gary Naugle Jr.	Town of Lahoma	Emergency Manager
James Strate	Autry Technology Center	Superintendent



**Table 2-1 GARFIELD COUNTY HAZARD MITIGATION PLANNING TEAM**

<b>Name</b>	<b>Affiliation</b>	<b>Position</b>
Rich Skrapke	Autry Technology Center	IT Coordinator
Marcie Mack	Autry Technology Center	Ass't Superintendent
Roydon Tilley	Chisolm Public Schools	Superintendent
Jim Lamer	Garber Public Schools	Superintendent
Patricia Berry	Garber Town Council	Council Member
Jerry Carson	Garber Town Council	Council Member
Aaron Moore	Garber Police Department	Chief
Samuel R Strecker	Town of Garber	Emergency Manager
Hank Deeds	Garber Fire Department	firefighter
Jim Patton	Kremlin-Hillsdale Public Schools	Superintendent
Ray E Corbin	Kremlin Fire Department	Firefighter
Brent Koontz	Pioneer-Pleasant Vale Schools	Superintendent
David O. Burford	Town of Drummond	Mayor
Mike Woods	Drummond Public Schools	Superintendent
Keith Dillingham	Drummond Fire Department	Lieutenant
Jeremy Messa II	Drummond Fire Department	Ass't Chief
Carrie K Carter	Region 1 MERC	Ass't Coordinator
Bill Presley	Region 1 MERC/RMRS	Coordinator
Mary Jo Rank	Garfield Co. Health Department	Emergency Response coordinator
Joel Eggers	Town of Fairmont	EM/Chief
John Hestand	St. Mary's Medical Center	Facilities Director
Brian Wilson	St. Mary's Medical Center	HR Manager/Emergency Coord.
Rick Roggon	Breckinridge Fire Department	Ass't Chief
Eric McVey	Pioneer Fire Department	Chief
Curtis Toews	Hunter Fire Department	Ass't Chief
Rusty Carter	Hunter Fire Department	Chief
Dustin Kingcade	Douglas Fire Department	Chief
Mark Morton	Vance AFB Fire Department	Chief
Eddy England	Life EMS	EVO
Jess Andrews	Garfield County LEPC	Member
Tom Shearer	Vance Air Force Base	Emergency Manager
Jay Sharp	American Red Cross	Disaster Services Specialist
Ester Foscher	APS-DHS	Supervisor
Bobby Tennell	Hillsdale/Carrier Fire Department	Chief
Steve Walker	Cimarron Elementary (Lahoma)	Superintendent
Amber Fitzgerald	Enid Public Schools	Director of Communications

### Garfield County (GCHMPT) Meetings



OTHERS WHO ATTENDED MEETINGS		
Julie Snow	Meadows Point Apartments	Service Coordinator
Sandy Howard	Our Daily Bread	Director
Stephen Foster	Woods County	Emergency Manager
Dianne Phillips	Alfalfa County	Emergency Manager
Charles Baldwin	Kingfisher Hospital	RT
Tamara Fischer	Okeene Hospital	CND
Teresa Lackey	Major County	Emergency Manager
Demond Burpo	World Harvest Church	Pastor
Larry Jantzen	Larry's Home Oxygen	Owner

## CHAPTER THREE

### Hazard Identification and Assessment

Only natural hazards are profiled in this plan. The Garfield County Hazard Mitigation Planning Team and disaster professionals reviewed the hazards possible in Garfield County both in 2004 and again in 2011. The review was based on historical data and experience of the GCHMPT members to identify the natural hazards most likely to impact Garfield County.

#### Review of Natural Hazards

Possible hazards were reviewed by the Garfield County Hazard Mitigation Planning Team during the meetings held in 2011-2013. The planning team initially went through the possible hazards in a roundtable discussion, based on their personal knowledge and experience in Garfield County.

Ten hazards are profiled in this plan. The team discussed Dam Failure, Landslides and Expansive Soils and determined these were not a problem in Garfield County at this time, so they are not profiled in this plan. Although other natural hazards certainly exist, their occurrence is rare in Oklahoma and they have caused no known damage in Garfield County. Future editions of this plan will contain information on those only if an occurrence has a significant impact to the risk of human life or property in Garfield County.

Through reviewing FEMA disaster declarations in the county since 2005 NCDRC data, reports completed by the County Emergency Management office, the following list was compiled:

Table 3-1 GARFIELD COUNTY NATURAL HAZARDS		
Hazard	How reviewed	Why identified
<b>Dam Failure</b>	<ul style="list-style-type: none"><li>Oklahoma Water Resources Board</li></ul>	There is only one High Hazard Dam listed for Garfield County. The dam is rural and would affect only a few structures.
<b>Drought</b>	<ul style="list-style-type: none"><li>Oklahoma Climatological Survey,</li><li>Oklahoma Water Resources Bulletin,</li><li>Historical Data</li></ul>	There have been recent events of drought throughout the state of Oklahoma including Garfield County.
<b>Earthquake</b>	<ul style="list-style-type: none"><li>Oklahoma Geological Survey</li><li>Past Historical Records</li></ul>	Garfield County has experienced a few damaging earthquakes but generally only feel earthquakes.
<b>Extreme</b>	<ul style="list-style-type: none"><li>National Weather Service</li></ul>	Oklahoma has prolonged


<b>heat</b>	<ul style="list-style-type: none"> <li>• Oklahoma Climatological Survey</li> </ul>	periods of high temperatures and is prone to wide swings of temperature
<b>Flood</b>	<ul style="list-style-type: none"> <li>• Local Emergency Management Records</li> <li>• FEMA Declarations</li> <li>• NCDC</li> </ul>	There has been a history of flash flooding in Garfield County due to heavy rains and inadequate drainage.
<b>Hailstorm</b>	<ul style="list-style-type: none"> <li>• Local Input</li> <li>• NCDC</li> </ul>	Garfield County experiences hailstorms during severe thunderstorms.
<b>High winds</b>	<ul style="list-style-type: none"> <li>• NCDC data</li> <li>• Team Hazard Survey</li> <li>• Oklahoma Climatological Survey</li> <li>• National Weather Service</li> <li>• Storm Prediction Center</li> </ul>	Oklahoma experiences hundreds of severe thunderstorms high winds every year, including downdrafts that have damaged structures.
<b>Lightning</b>	<ul style="list-style-type: none"> <li>• NCDC data</li> <li>• Team Hazard Survey</li> <li>• Oklahoma Climatological Survey</li> <li>• National Weather Service</li> </ul>	Oklahoma experiences hundreds of severe thunderstorms with lightning every year.
<b>Tornado</b>	<ul style="list-style-type: none"> <li>• Local Emergency Management Records</li> <li>• FEMA Declarations</li> <li>• NCDC</li> </ul>	Oklahoma has a distinction as the epicenter of Tornado Alley. Garfield County has experienced a number of tornados.
<b>Wildfire</b>	<ul style="list-style-type: none"> <li>• State Fire Marshall Records</li> <li>•</li> </ul>	State Fire Marshall records reflect damage from wildfires frequently in Garfield County.
<b>Winter storm</b>	<ul style="list-style-type: none"> <li>• National Weather Service</li> <li>• FEMA Declarations</li> </ul>	Severe ice and snowstorms occur regularly in northwest Oklahoma.

## Recent Disaster History

Garfield County has experienced five natural disasters since 2004 for which the county has been declared a disaster area by the President. The table below has a summary of the federally declared disaster history of Garfield County.

Table 3-2

## DISASTERS IN GARFIELD COUNTY 2004 through 2013

Incident Period	Nature of Disaster	FEMA #	Declaration Date	Declaration Area
<b>Feb 24-26, 2013</b>	Severe Winter Storm & Snow Storm	<b>DR - 4109</b>	April 8, 2013	
<b>Sep 12-19, 2008</b>	Severe Storm, Tornadoes, and Flooding	<b>DR-1803</b>	Oct 9, 2008	No map available thru FEMA website
<b>Jun 3-20, 2008</b>	Severe Storms and Flooding	<b>DR - 1775</b>	Jul 9, 2008	No map available thru FEMA website
<b>Jun 10-Jul 25, 2007</b>	Severe Storms, Flooding and Tornadoes	<b>DR - 1712</b>	Jul 7, 2007	No map available thru FEMA website
<b>Jan 12-26, 2007</b>	Severe Winter Storm	<b>DR – 1678</b>	Feb 1, 2007	No map available thru FEMA website

[www.fema.gov/disasters](http://www.fema.gov/disasters)

Throughout this plan we discuss the potential of future hazards being profiled using a basic percentage model to determine the risk probability. The probability of occurrence shown (Table 3-3) is the determination, based on history and consideration of the elements necessary for a specific disaster event to occur. Combined with how many of those factors are present, estimates of how likely a hazard is to occur in Garfield County can better be estimated.

## HAZARD PROFILE

### Dam Failure – Garfield County

A dam is an artificial barrier usually constructed across a stream channel to impound water. Timber, rock, concrete, earth, steel or a combination of these materials may be used to build the dam. The dam in Garfield County is constructed of earth. Dams must have spillway systems to safely convey normal stream and flood flows over, around, or through the dam. Spillways are commonly constructed of non-erosive materials such as concrete. Dams should also have a drain or other water-withdrawal facility for control of the pool or lake level and to lower or drain the lake for normal maintenance and emergency purposes.

The amount of water impounded is measured in acre-feet. An acre-foot is the volume of water that covers an acre of land to a depth of one foot. As a function of upstream topography, even a very small dam may impound or detain many acre-feet of water. Two factors influence the potential severity of a full or partial dam failure: the amount of water impounded and the density, type, and value of development and infrastructure located downstream.

In hydrological terms, a dam failure is a catastrophic event characterized by the sudden, rapid and uncontrolled release of an impoundment of water.

<b>Table 3-3      PROBABILITY OF OCCURRENCE - DEFINITION</b>	
<b>4-HIGHLY LIKELY</b>	Event is probable within the calendar year. Event has a 1 in 1 year chance of occurring.
<b>3-LIKELY</b>	Event is probable within the next three years. Event has up to 1 in 3 year's chance of occurring.
<b>2-POSSIBLE</b>	Event is probable within the next 5 years. Event has up to 1 in 5 year's chance of occurring.
<b>1-UNLIKELY</b>	Event is possible within the next 10 years. Event has up to 1 to 10 years chance of occurring.

According to the Oklahoma Water Resources Board (OWRB), Oklahoma has over 4,500 dams. Many are small farm and ranch ponds, or small lakes. Dams in Oklahoma are inspected by the Oklahoma Water Resources Board if they are non-Federally constructed and maintained dams which are: 1) greater than 6 feet in height with storage capacities of 50 acre-feet or more; 2) or greater in height with storage capacities of 15 acre-feet or more.

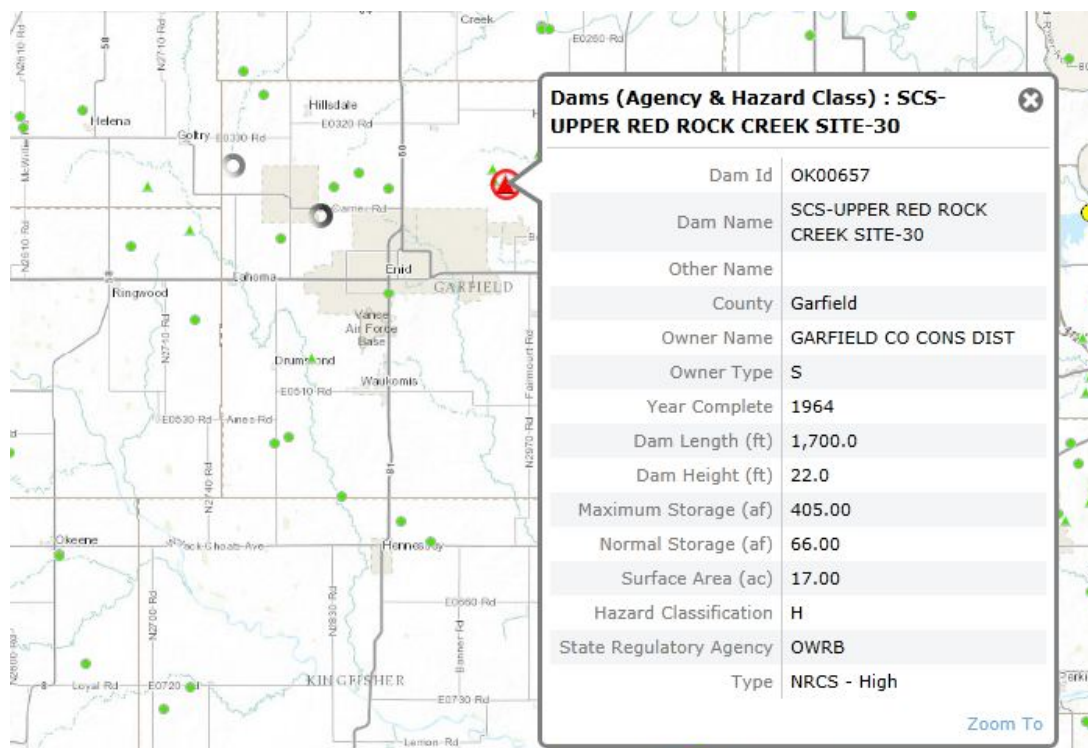


The program requires inspections every five and three years for low and significant hazard structures, respectively. It requires annual inspection of the state's high-hazard dams. High Hazard Dams are so designated due to the presence of one or more habitable structures downstream with loss of life likely to occur if a dam were to fail.

## Location; Rural Garfield County

The only high hazard dam as identified by the OWRB in Garfield County is NE of Enid. SCS-Upper Red Rock Creek Site-30 Dam is on a tributary of Red Rock Creek in Garfield County, Oklahoma and is used for flood control purposes. Construction was completed in 1964. Its normal surface area is 17 acres. It is owned by Garfield County Conservation District.

SCS-Upper Red Rock Creek Site-30 is of earthen construction. The core is assumed homogeneous, earth. The foundation is assumed to be soil. Its height is 22 feet with a length of 1700 feet. Maximum discharge is 1040 cubic feet per second. Its capacity is 405-acre feet. Normal storage is 66-acre feet.

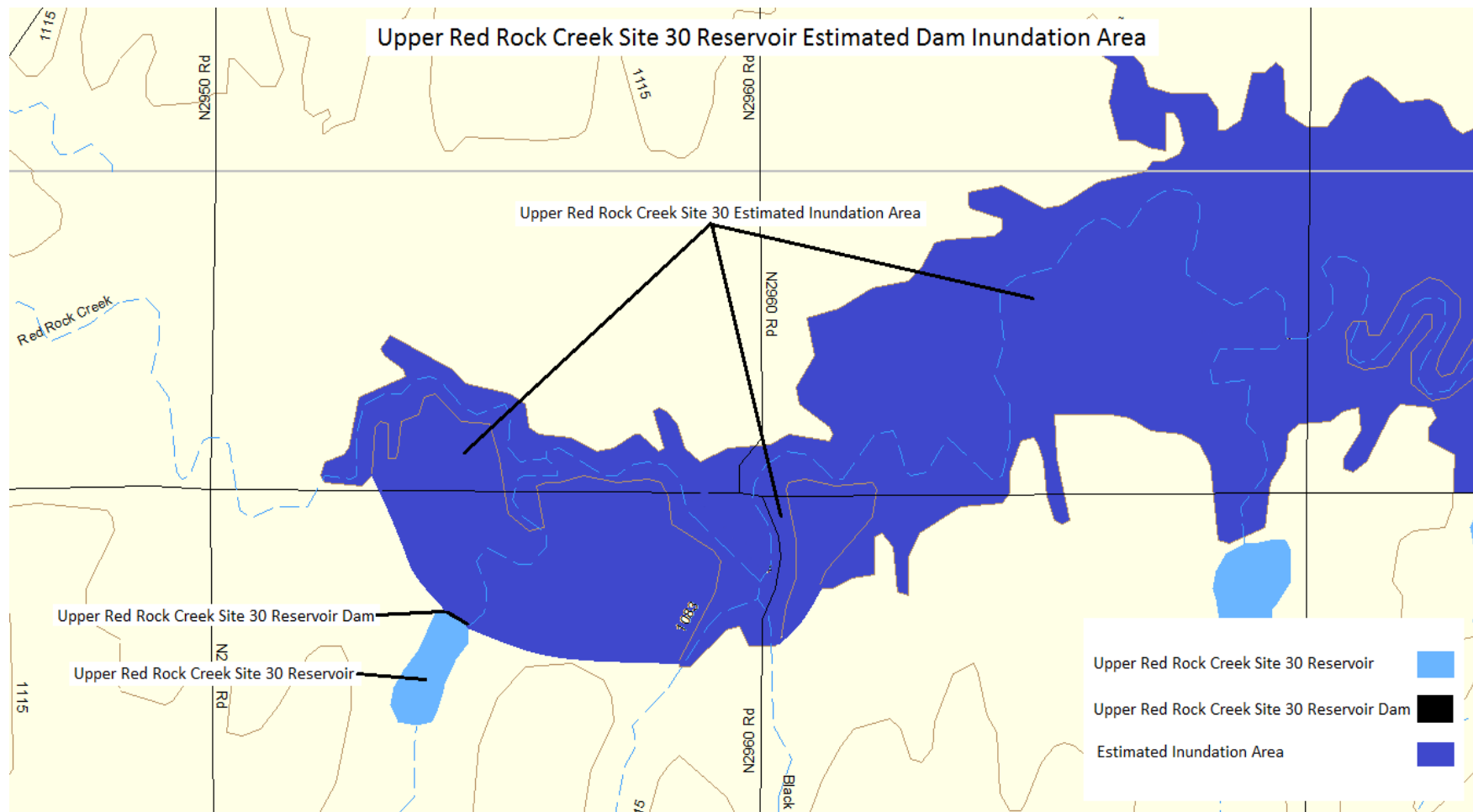


The dam is located west of North 102<sup>nd</sup> Street and South of Robertson Road in rural Garfield County.



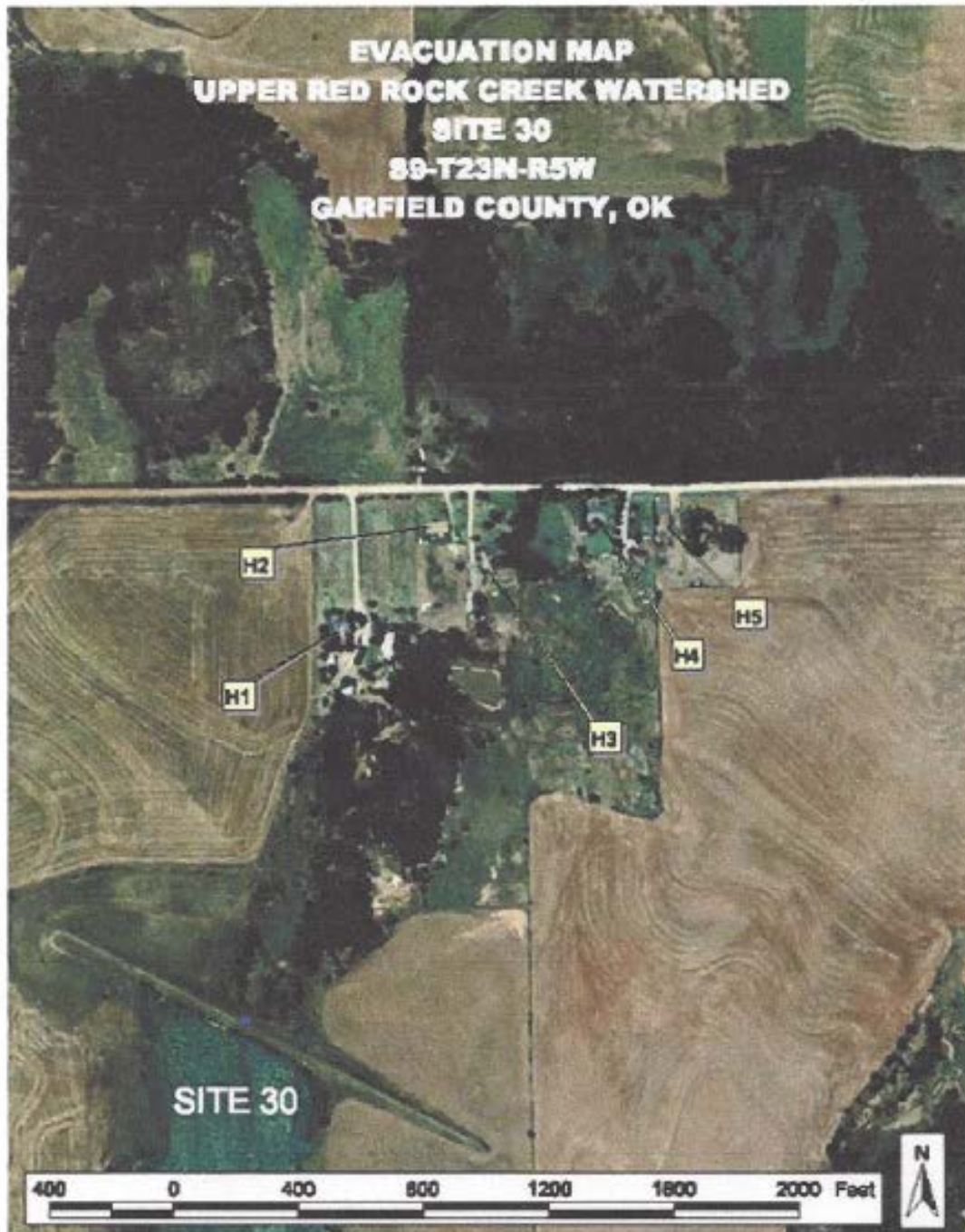
This is the only one high hazard dam in Garfield County. A failure in the dam would not affect any community but would affect a few residential homes and agricultural fields. No participating cities, towns, public schools or Autry Technology Center would be affected by a dam failure in Garfield County.







Appendix C- 3: EVACUATION MAP



Above map is taken from the Emergency Action Plan (EAP) provided by the Garfield County Conservation District. No data is available on water depth along flood inundation route.

## Extent

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As with any location in which man-made structures are built, potential failure of the structure could place lives and property at risk. The best way to minimize potential failure is to identify structures whose failure could cause the greatest loss of life and/or property, and to require those structures to undergo a rigorous inspection regime. From a hazard management perspective, the most noteworthy structures are those categorized as high-hazard dams. This designation relates solely to potential impacts of a structural breach; it is not an indication of the quality of construction or maintenance. Dam failures can result from any one or a combination of five reasons:

- Overtopping caused by water spilling over the top of a dam
- Structural failure of materials used in dam construction
- Cracking caused by movements like the natural settling of a dam.
- Inadequate maintenance and upkeep
- Piping—when seepage through a dam is not properly filtered and soil particles continue to progress and form sink holes the dam.

The Conservation District has indicated that, “As a general rule, in the absence of a formal breach inundation map, we consider the area five miles downstream at the top-of-dam elevation and below to be the potential area of risk.” Using the guidance from the Soil Conservation District, all areas at or below the dam height for five miles downstream from the dams has been classified as the estimated dam inundation area. Elevation reference marks are provided on the estimated dam inundation zone maps. (See map below for estimated dam inundation area)

A small break or seepage eliciting only 1-inch of flow per minute and causing nominal crop damage is considered a minor severity. Garfield County considers a breach releasing one foot of water flooding homes to be a major event.

## Previous Occurrences

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According to Garfield County Emergency Management records there have been no known previous dam failures in Garfield County.

## Probability of Future Events

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The dam profiled in this plan is 50 years old. Today the dams are in a different setting than when they were originally constructed. Some residential development has occurred downstream



from the dam; land use may have changed; sediment pools have filled and some dam features may have deteriorated. Some dams do not meet current dam safety regulations that have been enacted and revised with more stringent requirements than when the dam was built.

*U.S. Natural Resources Conservation Service (NRCS)* has undertaken rehabilitation of some of the dams in Oklahoma. The federal government provides 65 percent of the funding for rehabilitation projects and project sponsors provide 35 percent. Projects are selected on a priority basis with those with high safety and health concerns receiving the highest priority. In 2007 there was \$6.5 million from the legislature available through the Oklahoma Association of Conservation Districts with a potential of \$2.6 – 2.7 million in Rural Economic Action Plan (R.E.A.P) allocations possible.

The probability of a Dam Failure in Garfield County in the future is “**Unlikely.**” No participating jurisdictions, school districts or the Autry Technology Center are threatened by this dam.

## **Vulnerability and Impact**

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Dam failures are generally catastrophic if the structure is breached or significantly damaged. Dam failure can occur with little warning. Intense storms may produce a flood in a few hours or even minutes for upstream locations. Dam failure may occur within hours of the first signs of breaching.

Vulnerability and impact are assessed in several ways: the benefits to human society arising from the dam including agriculture advantages, damage prevention and the obvious benefit to nature and wildlife.

Assessment through the harm caused by dam failure is another way of determining vulnerability and impact due to the disruption of human lives through relocation, loss of employment due to loss of businesses loss of human life, loss of wildlife, livestock and crops. In the case of the residential farm properties that would likely be affected by a failure of this dam the property losses of homes, vehicles, agricultural businesses and possibly even through the loss of employment, loss of transportation availability and the possible contamination of water wells or septic operations could cause additional problems for the property owners. The economic loss would not be of particular impact to the area other than to the property owners and neighbors who might have to detour if Robertson Road was impacted.

A dam failure anywhere in Garfield County could be an economic disaster for the county depending on the dam location causing the problem. Obviously smaller lakes would not have the same effect as the larger ones. This reservoir would not have a major economic impact on the county.

Officials with Oklahoma's conservation districts have said the state's dam control system is flooded with problems and desperately needs money to fix them. Efforts are underway throughout the state to fix the problems but it takes money that is not currently available.

A failure of SCS-Upper Red Rock Creek Site-30 Dam would inundate approximately five or six residences located just below the dam in unincorporated Garfield County forcing the residents to relocate and find other housing. Some farm and pasture land would be inundated destroying crops and possibly killing some livestock creating a major economic loss for those ranchers and farmers. Robertson Road would likely be washed out and impassable forcing motorists and response agencies to find other routes to detour around the washout. No other participating jurisdictions, public schools, or Autry Technology Center would be directly affected by a dam failure event.

## **Conclusions**

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Garfield County has only one dam rated as high hazard based on evaluation and ranking by the Oklahoma Water Resources Board. Although the dam is in good condition now the possibility of deterioration could become a concern in the future. There is already a good inspection program on these dams and the county has no reason to believe those will not continue. Future projects to help the public become more aware of the potential of dam failure will be a step in mitigating the outcome of a breach in the future.

## **References**

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(OWRB) Oklahoma Water Resources Board (<http://www.owrb.ok.gov/maps/pmg/DMindex.html>)

## HAZARD PROFILE

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### Drought- Garfield County

Drought is a persistent and abnormal moisture deficiency having adverse impacts on vegetation, animals or people. There are dozens of more specific drought definitions used around the world based on the lack of rain over various time periods or measured impacts such as reservoir levels or crop losses. Because of the various ways people measure drought, no one has produced an objective drought definition upon which everyone can agree.

**Drought Types:** There are three main ways to consider drought.

1. ***Meteorological drought*** is usually based on long-term precipitation departures from normal, though high temperatures often play a role.
2. ***Hydrological drought*** refers to deficiencies in surface and subsurface water supplies. It is measured as stream flow, and as lake, reservoir, and ground water levels.
3. ***Agricultural drought*** occurs when there isn't enough soil moisture to meet the needs of a specific crop at a particular time. Agricultural drought is typically evident after meteorological drought but before a hydrological drought.

When no rain or only a small amount of rain falls, soils can dry out and plants die. When rainfall is less than normal for several weeks, months, or years the flow of streams and rivers declines, water levels in lakes and reservoirs and even aquifers fall, causing the depth of water in wells to decrease. If dry weather persists and water supply problems develop, the dry period can become a drought. The first evidence of drought usually is seen in records of decreased rainfall.

Within a short period, the amount of moisture in soils can begin to decrease. The effects of a drought on flow in streams and rivers or on water levels in lakes and reservoirs may not be noticed for several weeks or months. Water levels in wells may not reflect a shortage of rainfall for a year or more after the drought begins due to aquifer availability.

### Location

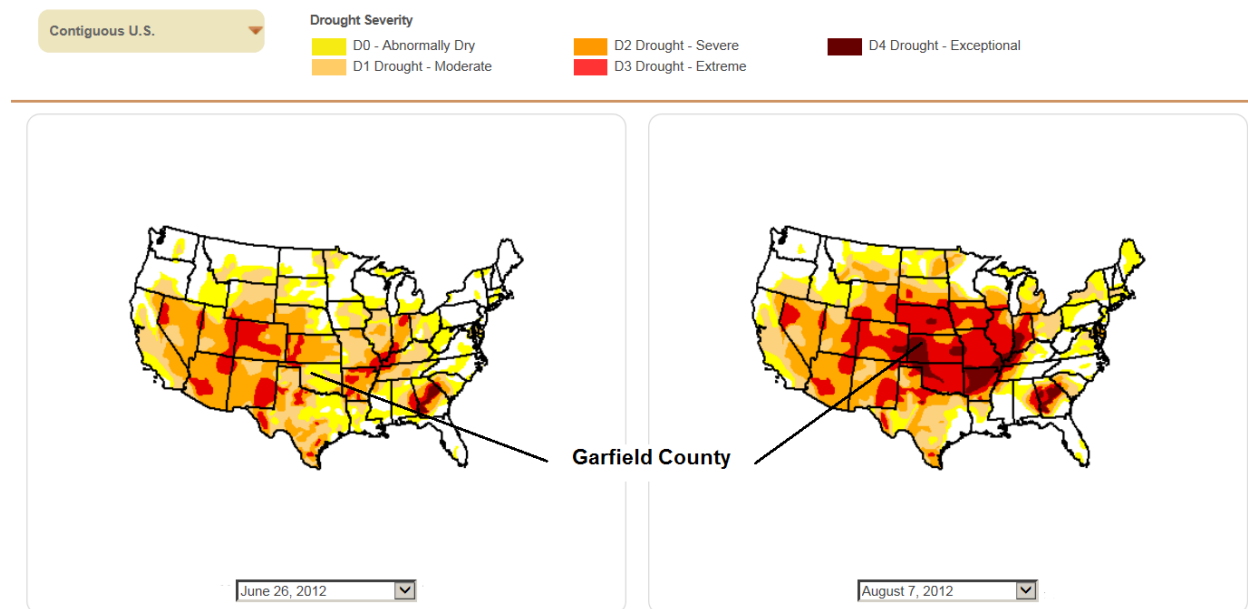
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All of Garfield County including the unincorporated communities, the incorporated communities the public school districts and Autry Technology Center are all susceptible to drought. Those communities dependent on



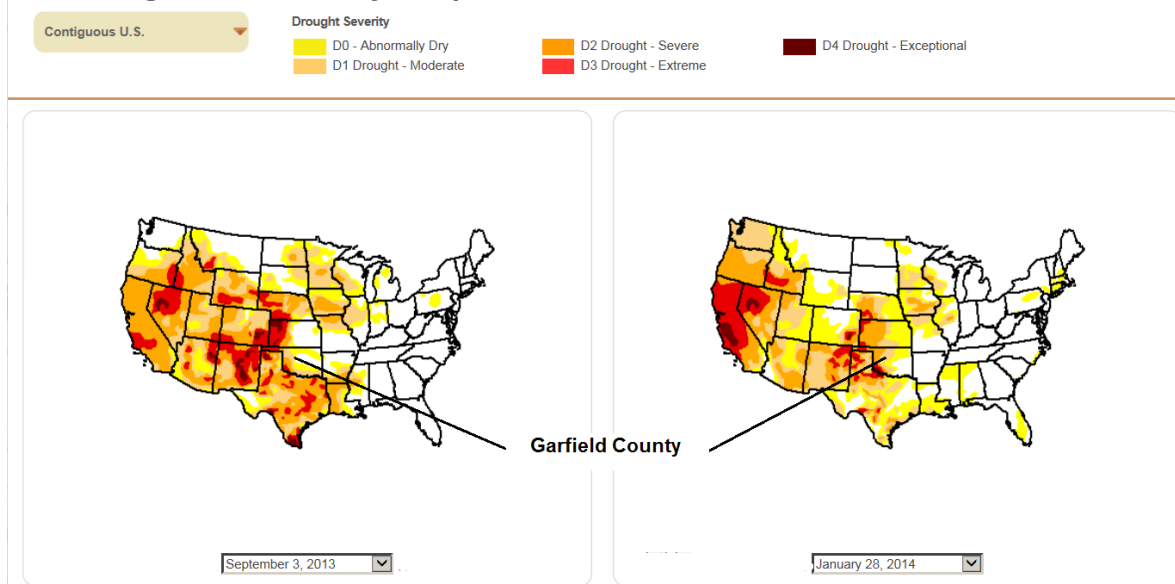
agriculture are the most effected due to shortage of rain and water for livestock. Garfield is a major agriculture county in Oklahoma and depends heavily on adequate water. Drought events can severely damage the economy of the entire county.

### U.S. Drought Monitor Weekly Comparison



As shown on the map above, June 26, 2012, all of Oklahoma including Garfield County was affected by Abnormally Dry to Moderate Drought. By August 7 the state and Garfield County was embroiled in an Extreme to Exceptional Drought. Part of Garfield County was in the Exceptional area. Drought conditions can intensify or decline quickly over a few months, as is

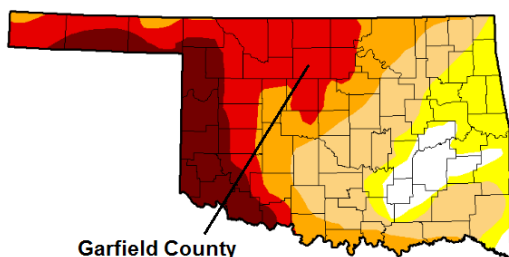
### U.S. Drought Monitor Weekly Comparison



shown on the September 3, 2013 map placing Garfield County clear of Drought conditions. By January 28, 2014, the drought in Garfield County had started again. The Drought Monitor Forecast Center indicates this drought will be short lived.

## U.S. Drought Monitor Oklahoma

**April 22, 2014**  
(Released Thursday April 24, 2014)  
Valid 7 a.m. Eastern



Drought Condition (Percent Area):

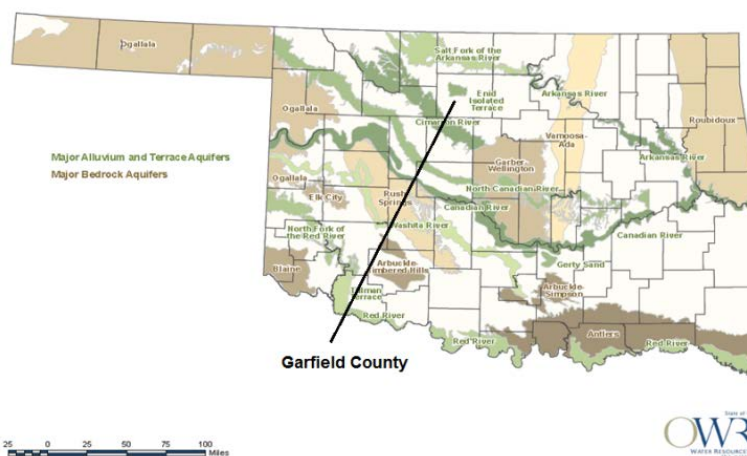
Week	Date	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4/22/2014	6.73	93.27	78.95	54.81	37.86	14.54
Last Week	4/15/2014	6.73	93.27	78.95	54.81	26.51	13.71
3 Months Ago	1/21/2014	35.17	64.83	38.04	18.99	4.84	2.40
Start of Calendar Year	12/31/2013	50.84	49.16	38.17	18.99	4.84	2.40
Start of Water Year	10/1/2013	21.74	78.26	43.00	17.62	4.42	1.45
One Year Ago	4/23/2013	10.80	89.20	72.08	53.76	30.53	5.48

### Intensity:



During Drought periods, much of Oklahoma is dependent on continued water supply through a series of aquifers throughout the state. Garfield County is limited on access to aquifers which would provide a good source of water so additional water wells would add additional sources of water to help alleviate the effects of drought on citizens and livestock.

## Major Groundwater Aquifers of Oklahoma



A series of conservation dams in the county as well as a number of streams, rivers and private ponds, provide adequate water during normal times. During severe drought conditions; however, streams and ponds dry up and water in the rivers get very low. Many areas within Garfield County and the participating jurisdictions have areas with high concentrations of the invasive Eastern Red Cedar trees. A fully grown eastern red cedar tree can absorb



approximately 30 gallons of water per day causing a drain on soil moistures and water supplies worsening conditions in a drought.

## Extent

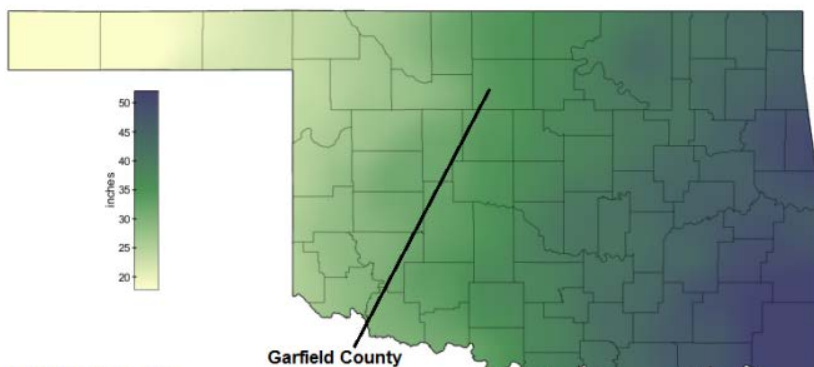
The **Palmer Drought Severity Index (PDSI)** was developed in 1965 as an index to “measure

### Normal annual precipitation

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OKLAHOMA  
CLIMATOLOGICAL SURVEY

Normal Annual Precipitation

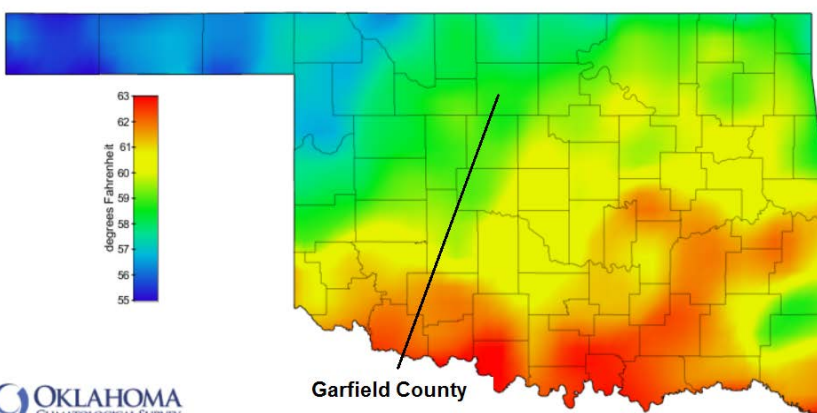
Drought Severity Index was to provide a measurement of moisture conditions that were “standardized” so that comparisons using the Index could be made between locations and between months. The Palmer Index is based on precipitation and temperature. The Palmer

### Normal annual temperature

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OKLAHOMA  
CLIMATOLOGICAL SURVEY

Normal Annual Temperature

Calculated using normal data provided by NCDC. Created 3:48:34 PM September 27, 2012 CDT. © Copyright 2012

1981-2010

Index can therefore be applied to any site for which sufficient precipitation and temperature data is available.

The Index varies roughly between -4.0 and +4.0. Weekly Palmer Index values are calculated for the Climate Divisions during every growing season and are on the internet from the Climate Prediction Center.

Table 3-4 PDSI CLASSIFICATIONS FOR DRY/WET PERIODS				
4.00 or more	Extremely wet		-0.50 to -0.99	Incipient dry spell
3.00 to 3.99	Very wet		-1.00 to -1.99	Mild drought
2.00 to 2.99	Moderately wet		-2.00 to -2.99	Moderate drought
1.00 to 1.99	Slightly wet		-3.00 to -3.99	Severe drought
.050 to 0.99	Incipient wet spell		-4.00 to -4.99	Extreme drought
0.49 to - 0.49	Near normal		Source: <a href="http://drought.unl.edu/whatis/induces.html">http://drought.unl.edu/whatis/induces.html</a>	

Garfield County, participating jurisdictions, public schools and Autry Technology Center considers anything of the magnitude -2.00 or below on the Palmer Drought Index to be a significant drought situation. By the time the situation drops below -3.00, Garfield County considers it to be a severe situation and appropriate actions need to be taken to conserve water.

## Previous Occurrences

According to NCDC records, there have been five drought events affecting Garfield County from 2005 through 2013.

Table 3-5 GARFIELD COUNTY DROUGHT EVENTS	
2005 through December 2013	
Date	Description
<b>Jan. – Jul 2013</b>	Very few rainfall events occurred during the month of January over Oklahoma. This allowed drought conditions to persist or even worsen in some areas. D4 (exceptional) drought continued through the month in Garfield County with persistent dry conditions. Precipitation for the month of July was generally near to above average throughout Oklahoma, with the area of drought further retracting in northern, western and southern Oklahoma. For the first time in a full year, D4 drought was eliminated from all the OUN CWA counties of Oklahoma. D2 (severe) drought was present at the beginning of the month, but had improved to D0 (abnormally dry) by the end of the month.
<b>Jan - Dec 2012</b>	Very little change occurred to the drought status over Oklahoma. Above normal precipitation for many continued to help in the devastating drought the region has been plagued in the last several months. However, since October, several instances of beneficial rains

	<p>have affected much of the state. Much of the winter crops are doing well as a result. However, some parts of the state, namely over western Oklahoma, will take longer for the long-term effects to go away. It may take several beneficial precipitation events to really help in alleviating the drought. D2 (severe) drought status continued through the month.</p>
<b>Apr - Dec 2011</b>	<p>Although two storm systems moved through the region in April, bringing with it beneficial rainfall, D2 to D3 drought steadily moved north and west through Oklahoma. D4 drought also developed over a few counties of southwest Oklahoma. This all stems from the very dry conditions seen over the region since the beginning of October 2010. In fact, this is the 3rd driest period statewide since October 1. Agricultural impacts were severe, as most the winter wheat crop was non-existent, as well as losses to other crops. The dry conditions also gave rise to enhanced fire weather concerns, with the normal increase in wind speeds during the spring months. Very few rainfall events occurred during the month of December over Oklahoma. This allowed drought conditions to persist or even worsen in some areas. D4 (exceptional) drought continued through the month in Garfield County with persistent dry conditions.</p>
<b>Jan - Mar 2007</b>	<p>Severe to extreme (D2-D3) drought conditions were seen across much of the northern half of Oklahoma during the month of January. However, much needed precipitation during the latter half of the month, mainly in some form of winter precipitation, allowed these areas to improve to just severe conditions (D2). This also allowed for an improvement to areas farther south that were in D2 drought conditions during the month of December. The winter storm from the 12th through the 14th provided much needed precipitation to improve these areas to D1 or less. The drought has been ongoing for over a year now, which continues the water worries over many communities. Even at low levels, most lakes are still considered at safe levels for everyday living and water rationing has been kept to a minimum. The agriculture industry continued to be hit hard by the drought. Although many farmers are beginning the year much better than they did last year due to the recent precipitation, many are fighting to save their 2007 crops. The recent precipitation has helped the top 12 inches of the soil, but the soil below this remains very dry. Additional precipitation will help crops that were planted during the fall, such as winter wheat. The crop damage for the area was estimated at 750 thousand dollars. The drought officially ended at the end of March, thanks to heavy rainfall that fell during the latter half of the month. The drought went from a D2 (extreme) to a D1 (Moderate) on 3/22. Several rounds of heavy rainfall from the 26th through the 30th continued the trend, upgrading the status to D0 (Abnormally Dry).</p>
<b>Jan - Dec</b>	<p><b>NOTE:</b> NCDC does not provide descriptions of drought events prior to</p>

2006	<p>November 2006. Severe to extreme (D2-D3) drought conditions were seen across much of Oklahoma during the month of November despite some precipitation. However, in northern Oklahoma the drought deteriorated to exceptional (D4) drought conditions by the end of the month. The drought that has lasted for more than a year continued to cause water concerns for many communities. Many communities had limited watering activities along with a concern over the availability of adequate drinking water. Outdoor recreation activities such as hunting were also affected due to the wildlife dealing with the lack of water and proper vegetation for food. The agriculture industry continued to be hit hard by the drought. Hay crop was small which led to many ranchers and farmers selling all or part of livestock herds due to the lack of food. The cotton crop was affected by the heat and drought of the summer months. There was also concern that the lack of adequate moisture will affect other future crops that were planted during the fall such as winter wheat. The dry conditions combined with wind caused the spread of several wildfires. Severe to exceptional (D2-D4) drought conditions were seen across much of Oklahoma during the month of December. However, above average precipitation totals over many locations allowed for several counties in northern Oklahoma to be upgraded to extreme (D3) by the end of the month, even allowing for the Burn Ban to be lifted in the final four Oklahoma counties. Questions had also risen about selling all or part of livestock herds due to the lack of food. Another concern is whether the combined lack of moisture over the last couple of years will affect future crops that were planted during the fall, such as winter wheat. The crop damage for the area was estimated at 1 million dollars.</p>
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## Probability of Future Events

Based on the history of droughts over last eight years and the fact the county is currently entering into another drought, although forecast to be short-term, the GCHMPT considered the probability of future events and concluded that drought is likely in the future. The entire county including all communities and school districts in the county including Autry Technology Center are equally at risk for drought and the probability of future events is **Highly Likely**.

## Vulnerability and Impact

Severe drought conditions cause many problems in Garfield County. Effects of drought are mostly felt by farmers and ranchers, through loss of crops and occasionally loss of livestock.

Ponds and streams lose water effecting irrigation systems around the county. Loss of water also can result in loss of livestock. Loss of both crops and water can cause farmers/ranchers to be forced into selling off their livestock usually at a financial loss. This situation also causes loss of



economic stability in municipalities. Businesses located in participating jurisdictions that rely mainly on agriculture as their primary business such as feed stores, coops and grocery stores feel the results when farmers lose crops and ranchers have to sell off their livestock early.



Because they no longer have livestock or are financially limited due to losses, they don't spend as much money in town. If drought conditions become extreme, some jurisdictions may eventually have to restrict water use through water rationing in their community to keep sufficient water for fire suppression or the needs of important industry

or day-to-day critical needs.

School districts are even affected by drought especially through local FFA and 4H programs that are important to students. Livestock projects or crop projects can be affected although perhaps not as severely as their parents due to less volume. These projects are important to the futures of the students although so are lessons learned through experiencing drought and its difficulties. Extended periods of drought prove damaging to manicured ball fields where the schools spend large sums of money to provide a safe playing surface for athletes. During periods of forced water rationing the grass on ball fields sometimes dies and must be replanted or new sod laid.

In Garfield County and participating jurisdictions drought causes dry vegetation and dry crops sometimes resulting in wildland fires that may result in loss of homes,



businesses, outbuildings, and grazing lands during the drought period. Sometimes during a drought, dry, cracking soil can cause water lines to break, resulting in water loss to large segments of the population; highway pavement will sometimes break, causing hazardous driving



conditions and forcing citizens and businesses to find alternate transportation routes. For additional losses caused by drought, refer to Critical Facilities in Appendix C.

## Conclusions

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Garfield County is susceptible to the many negative effects of drought. The most recent drought in the county started in the summer of 2012 and continued through 2013.

Based on past and current events, Garfield County will experience drought in the future. Through projects specified later in Chapter Four, it is possible to reduce the effects on the citizens and the land, causing the citizens to improve Garfield County's response to drought.

## References

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U.S. Drought Monitor (<http://droughtmonitor.unl.edu/archive.html>)  
Oklahoma Drought Monitor (<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?OK>)  
National Climatic Data Center (<http://www.ncdc.noaa.gov/stormevents/>)  
Oklahoma Climatological Survey (<http://climate.mesonet.org/>)

## HAZARD PROFILE

### Earthquake – Garfield County

An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock faults beneath the Earth's surface. For hundreds of millions of years, the forces of plate tectonics have shaped the Earth as the huge plates that form the Earth's surface move slowly over, under, and past each other. Sometimes the movement is gradual. At other times, the plates are locked together, unable to release the accumulating energy. When the accumulated energy grows strong enough, the plates break free causing the ground to shake. Most earthquakes occur at the boundaries where the plates meet; but some earthquakes occur in the middle of plates. Earthquakes strike suddenly, without warning. The largest earthquake experienced in Oklahoma occurred on November 06, 2011 with a magnitude 5.6. The Geological Survey said the earthquake was shallow, about three miles deep, and that the epicenter was four miles east of Sparks, located about 44 miles northeast of Oklahoma City. The quake followed smaller ones earlier in the day, including one at 2:12 a.m. with a preliminary magnitude of 4.7. Its epicenter was in Prague, about 50 miles east of Oklahoma City.

### Location

Generally, Garfield County is not considered a high risk for “damaging” earthquakes; however, there are “felt” earthquakes from time to time. All of Garfield County including the



unincorporated communities and the participating incorporated communities, all of the school districts and Autry Technology Center are susceptible to the effects of an earthquake. Even though most are not felt, the potential exists.

A little known fault, the Nemaha Uplift, runs through eastern Garfield County, and down to Oklahoma City.

The Nemaha zone is about 400 mi in length, extending south-southwest from the “Nemaha Mountain Structure” in southeastern Nebraska and northeastern Kansas, across Kansas and northern Oklahoma, then south into central Oklahoma, where it plays-out and terminates against the Oklahoma mega shear in southern Oklahoma. The uplift in Nebraska-Kansas is a buried, high-relief basement block, bounded on the east by the near vertical, 2500-ft Humboldt (Nemaha) fault. The zone varies in width from about 4 to 15 mi, with anastomosing patterns; it is commonly a single fault in central Oklahoma. Vertical displacement, the sense of which reverses along its trace, is generally up to several hundred feet, although it is 2500 feet in three places.

The Nemaha zone is regarded here primarily as a rather narrow transpressional fault zone that in Oklahoma experienced initial movement at least as early as Middle Ordovician (Taconian). It may have originated much earlier. Basically, it is a wrench-fault zone of limited horizontal displacement, where fault separation along the trace changes in a number of places from high angle normal to high-angle reverse, and where it is associated with pull-apart grabens and/or horst (pop-up) structures.

East of, and parallel to, the Nemaha zone in Oklahoma are a number of less prominent fault trends and related structures. Some provide evidence of strike-slip displacements during deposition. These faulted structures, like those along the Nemaha zone, provide traps for oil and gas fields, including some giants

**Nemaha Strike-Slip Fault Zone**

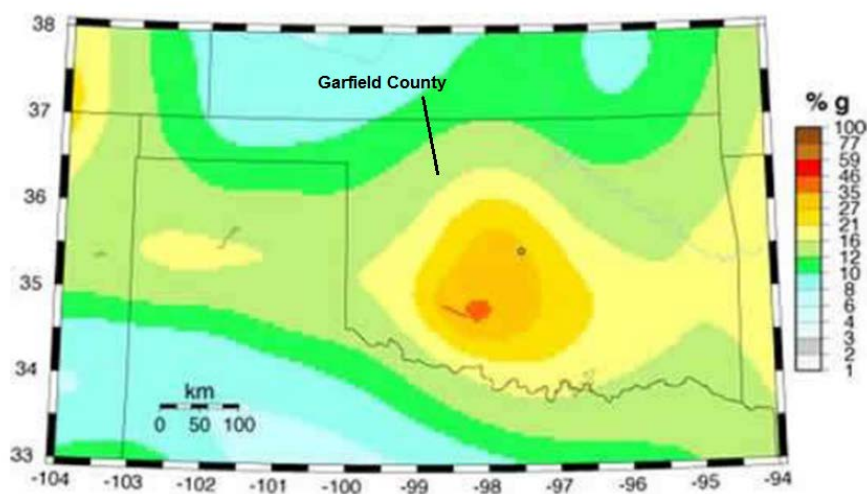
By: William McBee, Jr.

Search and Discovery Article #10055 (2003)

Adapted from oral presentation at AAPG Mid-Continent Section Meeting, October 13, 2003.

## Extent

There have been a series of “felt” earthquakes in Garfield County in recent years. Garfield County falls within the USGS 16%g Peak Ground Acceleration (PGA) with 10% probability of exceedance in 50 years seismic map.



USGS hazard map for Oklahoma, showing the potential level of shaking associated with possible earthquakes in Oklahoma. This map is based on our current understanding of past earthquakes and where earthquakes are likely to occur in the future. This map shows the amount of shaking that has a 1 in 50 chance of occurring in the next 50 years. Shaking is expressed as a percentage of g, or the acceleration of gravity, with reds indicating more shaking than blues. The red line in southwestern Oklahoma represents the Meers fault, which has had a recent earthquake (1,200-1,300 years ago) rupture to the surface.

This PGA equates to a **Modified Mercalli Intensity (MMI)** scale of IV or V. This MMI intensity would indicate that a future earthquake affecting Garfield County will cause only light to moderate ground shaking. This MMI scale of IV or V could result in building damages from none to very light. The impact of earthquake incidents would likely fall into the category of slight to moderate. Garfield County, participating jurisdictions, public schools and Autry Technology Center officials consider any earthquake activity above 4.8 on the Richter scale as a severe event and have decided they need to be prepared for such an event. Housing in the county is generally not built to “earthquake standards”. The earthquake effects in Garfield County in the past have been slight and have done little or no damage reported in the county; A more significant earthquake in the future could cause even moderate damage although major damage is not anticipated. Currently the Nemaha uplift and associated faults and folds are primarily of concern to the oil industry, since the bulges and cracks in the bedrock are sites at which oil collects. The steeply dipping (meaning nearly vertical) fault has been mildly reactivated, and the ongoing sequence of earthquakes is not entirely unexpected for the foreshock-aftershock sequence of a 5.6.

<b>Table 3-6 Earthquake: Mercalli/Richter Scale Comparison</b>		
<b>Mercalli Scale</b>	<b>Richter Scale</b>	<b>Full Description</b>
<b>I.</b>	<b>0 – 1.9</b>	Not felt. Marginal and long period effects of large earthquakes.
<b>II.</b>	<b>2.0 -2.9</b>	Felt by persons at rest, on upper floors, or favorably placed.
<b>III.</b>	<b>3.0 – 3.9</b>	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
<b>IV.</b>	<b>4.0 - 4.3</b>	Hanging objects swing. Vibration like passing of heavy trucks. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink the upper range of IV, wooden walls and frame creak.
<b>V.</b>	<b>4.4 - 4.8</b>	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Pendulum clocks stop, start.
<b>VI.</b>	<b>4.9 - 5.4</b>	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Books, etc., off shelves. Pictures off walls. Furniture moved. Weak plaster and masonry D cracked. Small bells ring. Trees, bushes shaken.
<b>VII.</b>	<b>5.5 - 6.1</b>	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices. Some cracks in masonry C. Waves on ponds. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
<b>VIII.</b>	<b>6.2 - 6.5</b>	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
<b>IX.</b>	<b>6.6 - 6.9</b>	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected, earthquake fountains, sand craters.
<b>X.</b>	<b>7.0 - 7.3</b>	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments.



<b>Table 3-6 Earthquake: Mercalli/Richter Scale Comparison</b>		
<b>Mercalli Scale</b>	<b>Richter Scale</b>	<b>Full Description</b>
		Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
<b>XI.</b>	<b>.7.4 - 8.1</b>	Rails bent greatly. Underground pipelines completely out of service.
<b>XII.</b>	<b>&gt; 8.1</b>	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.
<small> Masonry A: Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.  Masonry B: Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.  Masonry C: Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.  Masonry D: Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally. </small>		

The Richter magnitude scale was developed in 1935 by Charles F. Richter of the California Institute of Technology as a mathematical device to compare the size of earthquakes. This scale is usually the one referred to by news media when making public reports. The Richter Scale is the most familiar to the public. The table above shows how the Richter's original method to measure a seismogram for a magnitude estimate is used to determine damage levels.

## Previous Occurrences

The Oklahoma Geographical Survey Observatory near Leonard,, Oklahoma, provides a brief history of earthquake activity affecting Garfield County. The epicenters were not in Garfield County but in counties, approximately 60 to 120 miles south-southeast of Garfield County.

<b>Table 3-7 GARFIELD COUNTY EARTHQUAKE EVENTS</b>		
<b>1995 – January 2014</b>		
<b>Oklahoma Geological Survey Observatory</b>		
<b>Date</b>	<b>Location</b>	<b>Magnitude</b>
<b>Aug 08, 2025</b>	Garfield County - 36.659 - -97.724 near Kremlin	3.0
<b>Feb 23, 2009</b>	Garfield County – 36.353N - -98.098W – NW of Carrier near Hwy 132 and the county line.	3.2
<b>Jun 26, 2009</b>	Garfield County – 36.33N – -96.87W – east of Garfield County	3.6
<b>Apr 11, 2000</b>	Garfield County – 36.2703 - -97.5668 - southeast Garfield County	2.8
<b>May 14, 1999</b>	Garfield County - 36.3207 - -97.5349 - southeast Garfield County	1.9

On November 5, 2011 at 2:12 AM, a magnitude 4.7 earthquake occurred in Lincoln County, Oklahoma. This turned out to be a foreshock to a much larger earthquake. The main shock

(magnitude 5.6) occurred at 10:53 PM on November 6. The earthquakes occurred about six miles northwest of Prague and 5.2 miles southeast of Sparks. These earthquakes occurred very close to where a magnitude 4.3 earthquake occurred on February 27, 2010. From the location of the earthquake and the focal mechanism, it is most likely that this earthquake occurred on the Wilzetta fault also known as the Seminole Uplift. Although the epicenter was located in Lincoln County, these earthquakes were felt in Garfield County as well as over a large part of Oklahoma and other states.

## **Probability of Future Events**

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Earthquakes have become more common in Oklahoma, but they are often too small to be felt. For the past three decades, Oklahoma averaged about 50 earthquakes a year. But that number has skyrocketed in the past few years. In 2013 — the state's most seismically active year ever — there were almost 3,000. These earthquakes were scattered broadly across the central part of the state. In 2008, the rate of earthquakes began to rise, with over a dozen earthquakes occurring in the region east-northeast of Oklahoma City and southwest of Tulsa, Oklahoma. In 2009, the rate of seismicity continued to climb, with nearly 50 earthquakes recorded—many strong enough to be felt. This activity continued in 2010. The shallow magnitude 4.7 and 5.6 earthquakes of November 5, 2011, are the largest events recorded during this period of increased seismicity. Additionally, the magnitude 5.6 quake is the largest quake to hit Oklahoma in modern times. In October, the U.S. Geological Survey warned that Oklahoma's risk of quakes has increased tenfold. "We've statistically analyzed the recent earthquake rate changes and found that they do not seem to be due to typical, random fluctuations in natural seismicity rates," said Bill Leith, USGS seismologist. "These results suggest that significant changes in both the background rate of events and earthquake triggering properties needed to have occurred in order to explain the increases in seismicity. This is in contrast to what is typically observed when modeling natural earthquake swarms."

Based on the previous warning and data from the Oklahoma Geological Survey and the USGS, along with immediate past history, indicates the potential of future earthquakes in Garfield County, participating jurisdictions, public schools and Autry Technology Center is **Likely**.

## **Vulnerability and Impact**

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In Garfield County and participating jurisdictions buildings and schools with foundations resting on unconsolidated landfill and other unstable soil, as well as trailers and homes not tied to their

foundations are at risk because they can be shaken off their mountings during even a modest earthquake. Damage could be sufficient to displace the residents. Roads and bridges may be damaged forcing motorists, including school busses and commercial drivers, to find alternate routes. Natural gas lines, water lines, pipelines, electric lines, even underground lines may be damaged causing loss of those services to the population. Not only is loss of service a factor, but there may be environmental concerns. Inside structures and school facilities; bookshelves, hot water tanks, pictures on walls, and some equipment may suffer damage by falling over. Glass from broken windows can injure staff, students, and citizens in Garfield County, participating jurisdictions, public schools, and Autry Technology Center. When a serious damaging earthquake occurs in a populated area, injuries and even deaths may occur in addition to the property damage.

## **Conclusion**

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Due to the increase in Earthquake activity, Garfield County will likely experience more "felt" earthquakes. Additional consideration is the fact that the largest earthquake in the state in 2011 (5.6) was felt in Garfield County 120 miles away. Officials in Garfield County feel it is possible that significant damage could occur in the future and the citizens in the county need to be prepared for such an event. Chapter Four addresses some mitigation action projects.

## **References**

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Oklahoma Geological Survey (<http://www.ogs.ou.edu/homepage.php>)  
US Geological Survey (<http://www.okgeosurvey1.gov/>)

## HAZARD PROFILE

### Extreme Heat

Oklahoma is a part of the Southern Great Plains, and is prone to wide swings of temperature. Summertime temperatures routinely climb above the 100-degree mark. Temperatures that hover 10 degrees or more above the average high temperature for the area and lasts for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a “dome” of high atmospheric pressure traps hazy, damp air near the ground.

#### Temperature

Average Annual: 60 degrees

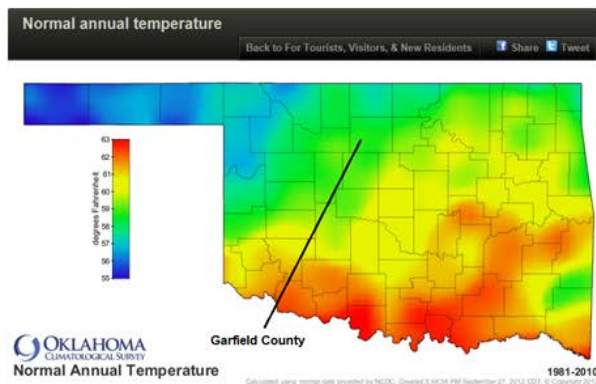
Average Maximum: 72 degrees

Average Minimum: 48 degrees

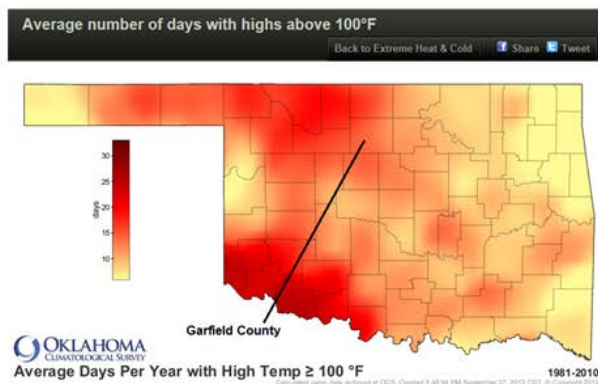
Highest: 118 degrees  
(Enid, August 12, 1936)

The hottest period of the Oklahoma summer extends from mid-July through mid-August. Overall, August, the third and final month of the climatological summer, is Oklahoma's second hottest, fifth driest, and least windy month. The normal statewide monthly temperature is 80.9 degrees Fahrenheit (F). Garfield County's average maximum temperature according to the Oklahoma Climatological

Survey is 72 degrees with the highest recorded temperature occurring in Enid on August 12, 1936 when temperatures reached 118 degrees F.



The normal annual temperature for a 30-year period using observations from the National Weather Service cooperative observer network. Data are quality assured by the National Climatic Data Center.



The average number of days per year when the high temperature is 100 degrees Fahrenheit or hotter.

Garfield County has an annual average temperature of 60 degrees F with only 15 - 20 days during the year experiencing temperatures over 100°, usually during July and August. The maps above show the variation between normal temperatures and the high temperatures in the summer over 100 degrees.

## Location

All of Garfield County including the unincorporated communities, the participating incorporated communities, the school districts and Autry Technology Center are all susceptible to the effects of extreme heat. The county has an annual average of 75 days with temperatures above 90 degrees. Humidity levels add to the discomfort level felt by citizens in Garfield County.

## Extent

It is often extremely hot and humid during the summer in Oklahoma including Garfield County. Extended periods of higher than normal temperatures could result in the heat becoming a hazard to life and property. Private businesses or non-profit organizations sometimes open their facilities to residents that don't have adequate cooling in their homes. Some organizations may give away fans or air conditioners to alleviate the effects of humidity and temperature during June, July and August.

**The Heat index** is how the heat and humidity in the air combine to make individuals feel. Higher

Mean Monthly Humidity and Moisture					
	Daily Maximum Relative Humidity	Daily Minimum Relative Humidity	Daily Average Relative Humidity	Daily Average Dewpoint (°F)	Daily Average Vapor Deficit
January	89	50	72	26	2.5
February	88	47	70	30	3.5
March	89	47	70	36	4.3
April	90	46	70	46	6.1
May	94	50	74	58	7.4
June	92	43	68	64	12.3
July	88	38	63	67	17.4
August	85	38	62	66	17.3
September	87	41	65	58	12.3
October	88	47	70	49	6.6
November	89	49	72	38	3.8
December	90	54	75	29	2.4
<b>Annual</b>	<b>89</b>	<b>46</b>	<b>69</b>	<b>47</b>	<b>8.0</b>

humidity plus higher temperatures often combine to make us feel a superficial temperature that is higher than the actual air temperature. Garfield County, participating jurisdictions, public schools and Autry Technology Center considers any extended period with heat indices above 90 degrees as a severe event and cause for concern with periodic check-ups on the elderly and other at risk populations.

The National Weather Service is now issuing Excessive Heat Warnings by county through the NOAA Weather Radio system. They are issued when the combined effect of high temperatures



and high humidities result in daytime heat indices greater than or equal to 105° F and nighttime ambient temperatures greater than or equal to 80 degrees F that will persist for two days or longer.

Table 3-8 Heat Index Chart																	
		% Relative Humidity															
		15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
T e m p e r a t u r e	110	108	112	117	123	130											
	105	102	105	108	113	117	122	130									
	100	97	98	102	104	107	110	115	120	126	132						
	95	91	93	95	96	98	100	104	106	109	113	119	124	130			
	90	86	87	88	90	91	92	95	97	98	100	103	106	110	114	117	121
	85	81	82	83	84	85	86	87	88	89	90	92	94	96	97	100	102
	80	76	77	78	78	79	79	80	81	82	83	84	85	86	87	88	89
Legend																	
80-89 degrees		Fatigue is possible with prolonged exposure and/or physical activity.															
90-104 degrees		Sunstroke, heat cramps and heat exhaustion are possible with prolonged exposure and/or physical activity.															
105-129 degrees		Sunstroke, heat cramps and heat exhaustion are likely. Heat stroke is possible with prolonged exposure and/or physical activity.															
130+ degrees		Heatstroke/sunstroke is highly likely with continued exposure.															

## Previous Occurrences

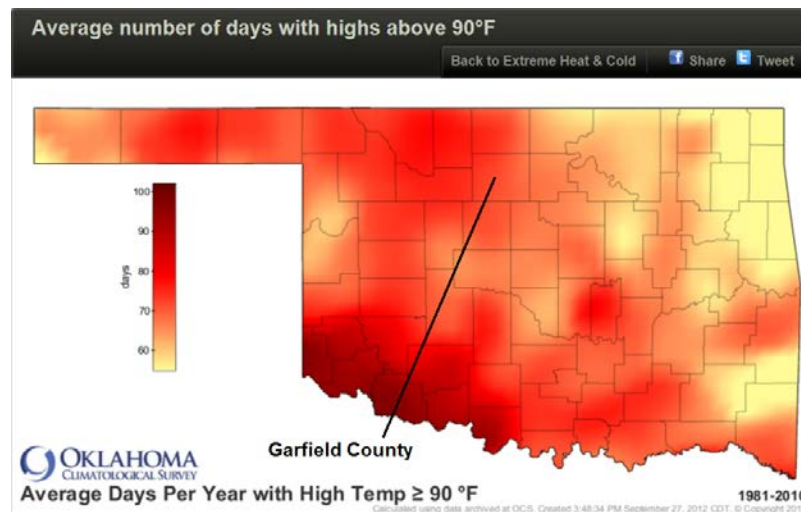
NCDC gives no additional information concerning heat events. Garfield County lists two major extreme heat events over the last eight years. Excessively high temperatures cause significant problems for citizens and agriculture. Damages listed indicate damage amounts from all of the affected counties in Oklahoma, not only from Garfield County.

Table 3-9 GARFIELD COUNTY EXTREME HEAT EVENTS 2001-APRIL 2006 DATA FROM NATIONAL CLIMATIC DATA CENTER		
DATE	EVENT DESCRIPTION	DAMAGES PROPERTY
2013- According to data from the Oklahoma Mesonet, the statewide average temperature finished at 79.2 degrees to rank as the 19 <sup>th</sup> warmest June on record, 2.7 degrees above normal. Statewide average records date back to 1895. June's warmth follows a pattern that began over two years ago		

<b>Table 3-9 GARFIELD COUNTY EXTREME HEAT EVENTS</b> <b>2001-APRIL 2006</b> <b>DATA FROM NATIONAL CLIMATIC DATA CENTER</b>		
DATE	EVENT DESCRIPTION	DAMAGES PROPERTY
with 22 out of the last 27 months being warmer than normal. The January-June statewide average entered the record books at 60.1 degrees, 4.9 degrees above normal. That obliterates the previous record mark of 58.9 degrees from the same period in 2006. NCDC no longer provides up to date information for heat/heat extremes after 2006.		
<b>16 Jul 2006 - 13 Aug 2006</b>	The triple digit heat that began at the end of July continued through at least the first half of August across Oklahoma. Overnight lows also remained high with temperatures only falling into the upper 70s to low 80s most nights. The heat caused a strain on several power grids causing local authorities to ask people to minimize the consumption of power during the hottest parts of the day to prevent brown outs.	\$ 10,000.00
<b>04 Jul 2001 - 31 Jul 2001</b>	An extended period of excessive heat affected all of western and central Oklahoma in July. Daily mean temperatures ranged from the mid-80s to near 90 degrees, which is four to five degrees above normal. Most areas regularly experienced high temperatures at or above 100 degrees. In addition to the excessive heat, rainfall averaged about one-third of normal.	NONE REPORTED

## Probability of Future Events

Because extreme heat is a hazard for all Oklahomans, efforts are being made throughout the



state to mitigate the effects of the extreme heat hazard. The National Weather Service is now issuing Excessive Heat Warnings by county through the NOAA Weather Radio system. In Garfield County, participating jurisdictions, public schools and Autry Technology Center based on past history and public input,

the probability of a future extreme heat event is **Highly Likely**.

## Vulnerability and Impact

Garfield County has a significant extreme heat hazard due to its climate. Summers are hot and humid with daytime highs in the upper 80's to the mid-90s. Summers generally experience less than 5 inches of rain in July and August and the first of September.

Electrical power supplies throughout the county are often affected due to high use by the population which causes power “brownouts” or outages. Some elderly citizens do not have either air conditioners or fans that work or do not use them because of electrical costs and they are often the victims of the severe temperatures. The handicapped and very young are also common victims of extreme heat. People working outside are exposed to the extreme temperatures and need to know how to take care of themselves to prevent heat exhaustion and heat stroke. Public education programs can help tremendously to reduce the effects of heat and humidity.

Roads are often affected by extreme heat. Some older asphalt roads tend to “melt” or get soft with continued heat. Concrete roads “explode” and crack due to the heat. Many of these roads are used by school buses and mail carriers. The damaged roads often result citizen and residents having to find an alternate route.



Agriculture and livestock have been Garfield County's principal industries. Primary crops have included wheat, corn, and hay. Extreme heat can be extremely damaging to various crops during the summer months. Livestock and livestock products are also a major part of Garfield County's economy; however, the industry suffers when grass dries up and ranchers are unable to properly feed their livestock and have to sell off earlier than planned. This also causes loss of capital for an industry that is struggling with prices already.

### **All Wheat: Acreage, Yield, and Production**

<b>Planted for All Purposes</b>			<b>Harvested for Grain</b>		<b>Yield per Acre</b>		<b>Production</b>	
<b>County</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>	<b>2014</b>
Garfield	315,000	281,000	280,000	204,000	40.0	15.1	11,200,000	3,071,000

### **All Corn: Acreage, Yield, and Production**

<b>Planted for All Purposes</b>			<b>Harvested for Grain</b>		<b>Yield per Acre</b>		<b>Production</b>	
<b>County</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>	<b>2014</b>
Garfield	21,500	14,800	18,400	14,200	63	101	1,150,000	1,431,000

## Cattle and Calves: Inventory by Class

All Cattle and Calves				Beef Cows			Milk Cows		
County	2013	2014	2015	2013	2014	2015	2013	2014	2015
Garfield	76,000	77,000	83,000	D	D	D	D	D	D

(D) Withheld to avoid disclosing data for individual operations.

School districts are often hit with higher utility bills due to the increased cost of cooling classrooms and facilities for educating students. Power outages due to higher power consumption can occur leaving staff and students in the dark. Special considerations must be taken to protect staff and students from the effects of heat exhaustion or heat stroke. Sometimes this leads to decisions to keep students inside during recess periods causing stress to both students and staff.

## Conclusion

As has been stated earlier in this plan, Garfield County has a potential extreme heat hazard due to its climate. Agriculture is an important industry in Garfield County and extreme heat can be devastating to that industry if it is for a longer than normal period. The effects of extreme upon the human population in Garfield County can also be devastating if it lasts very long. Water for normal uses may be rationed to leave adequate water supply for firefighting or other critical services.



Some businesses can also be adversely affected by water rationing which can also negatively affect the economy in Garfield County. Additional planning toward mitigation efforts can greatly reduce these concerns.

## References

FEMA - Federal Emergency Management Agency (<http://www.fema.gov/disasters>)  
 NWS - National Weather Service – Norman (<http://www.srh.noaa.gov/oun/>)  
 OCS - Oklahoma Climatological Survey ( <http://climate.mesonet.org/>)

## HAZARD PROFILE

### **Flood – Garfield County; Carrier; Drummond; Enid; Lahoma; and Waukomis.**

Flood is defined as an overflow or inundation that comes from a river or other body of water and causes or threatens damage. Floods are usually a result of heavy, slow moving thunderstorms or rains extending over a long period. Floods can also occur through a dam failure or over-topping. Flash flooding is a short-term water inundation usually as a result of storm water drainage or low water crossings on roadways.

Fortunately, most of the known floodplains in the United States have been mapped by FEMA, which administers the National Flood Insurance Program. When a flood study is completed by the NFIP, the information and maps are assembled into a Flood Insurance Study (FIS). An FIS is a compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community and includes causes of flooding. The FIS report and associated maps delineate Special Flood Hazard Areas (SFHAs), designate flood risk zones, and establish base flood elevations (BFEs), based on the flood that has a 1% chance of occurring annually, or the 100-year flood.



Flooding can take many forms including river floods (riverine) and creeks. Riverine flooding occurs when excessive rainfall from areas upstream of the problem area exerts pressure on rivers or drainage channels. Riverine flooding is usually a gradual process with warning time from several hours to several days in many cases. River water surface elevations exceed the natural banks of the channel inundating the areas within the floodplain or beyond. Riverine flooding has the tendency to remain in flood stage for a longer period than other types of flood hazards. In many cases, riverine flooding may cause greater flood losses due to the length of



time structures are inundated, the velocity and depth of the water, and the debris associated with the fast moving water.

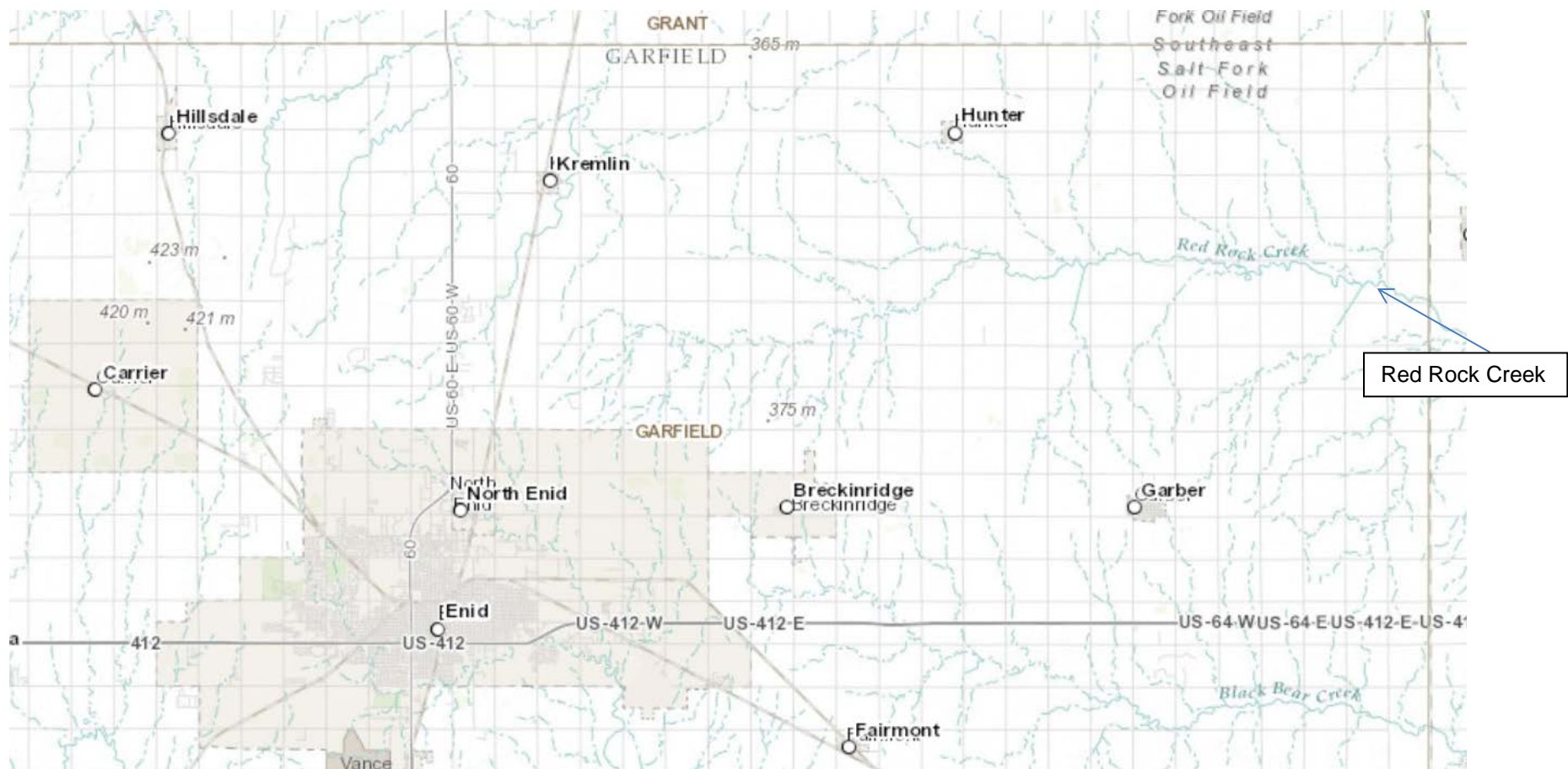
## **Location**

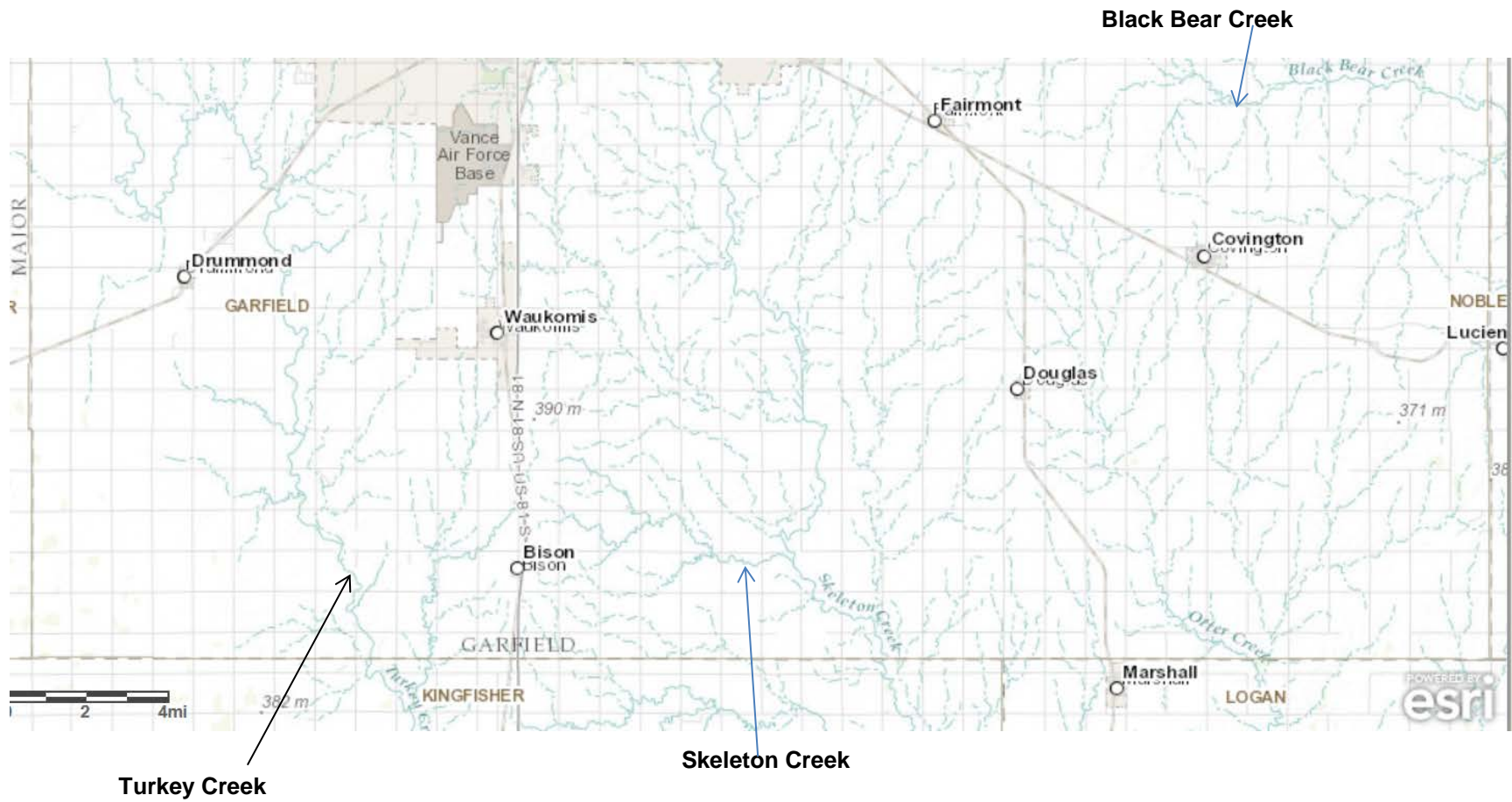
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The unincorporated part of Garfield County has flooding primarily affecting agricultural areas although occasionally structures may be affected. Communities generally affected by flooding and flash flooding in Garfield County are Carrier; Enid; Lahoma; and Waukomis. Most flooding is a result of poor drainage and low water crossings. A few other communities are also occasionally affected by street flooding but it has not been a major problem for them. The school districts in Drummond, Lahoma and Waukomis and the Autry Technology Center occasionally experience flooding problems due to inadequate street drainage and flat terrain. Several roads are at risk from flooding in Garfield County and participating jurisdictions, some of the most vulnerable include: 102nd Street from State Highway 412 to Breckinridge, Imo Road and W Chestnut, Highways 45 and 81, north and west of Enid, Highway 412 east of Lahoma, Highway 132 between Carrier and Hillsdale, Oakwood Road from Enid to Waukomis, Wood Road or EW0510 between HWY 132 and HWY 81. Many local and county roads become flooded and impassable due to heavy rains and poor drainage. There has also been flooding from Black Bear Creek; Skeleton Creek, Turkey Creek and Red Rock Creek. These have not caused problems to municipalities only to agricultural properties nearby. (See maps on following page)

Raising roadways, replacing small tin horns with larger ones, or installing tin horns where needed, installing bridges where low water crossings exist, increasing drainage through drainage improvements, and adding retention/detention ponds at strategic areas to hold water until it drains off would all be methods of reducing or eliminating flood risk in Garfield County, jurisdictions, and schools with flood risk.

There are currently four severe repetitive loss properties listed within Garfield County. Three of those are located within the City of Enid (frame residential) and the forth is located in the Town of Waukomis (brick residential).





## Extent

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There are several low water bridges in the county that frequently flood whenever 1-2 inches of rain fall in a few hours, which usually occurs with overnight rainfall. When these bridges become impassable from floodwaters, they isolate the rural residents from vital services, including emergency services. Several of those bridges are listed below.

### Garfield County Low Water Bridges / Crossings

1. Bitter Creek Queen-post Pratt pony span built in 1905 near Douglas.
2. Bitter Creek Queen-post Pratt pony span built in 1906 near Douglas.
3. Black Bear Creek Queen-post Pratt pony span near Garber.
4. Black Bear Creek Half-hip Pratt pony span near Graber.
5. Branch Hackberry Creek Small half-hip Pratt near Waukomis.
6. Branch Wild Horse Creek Queen-post Pratt built in 1906 near Kremlin.
7. Buffalo Creek Queen-post Pratt span near Bison.
8. Coldwater Creek Abandoned Queen-post Pratt pony near Hillsdale.
9. Coldwater Creek Queen-post Pratt near Hillsdale.
10. Crow's Nest Creek 75-foot pin-connected half-hip Pratt truss built in 1913.
11. 4-D Creek Queen-post Pratt pony truss south of Hayward.
12. Hackberry Creek 100-foot Camelback pony span between Douglas and Waukomis.
13. Panther Creek 55-foot Half-hip Pratt on county line near Lucien.
14. Otter Creek Pratt pony truss near Douglas.
15. Skeleton Creek Abandoned Pratt pony span near Douglas.
16. Skeleton Creek 100-foot Parker pony span southwest of Douglas.
17. Turkey Creek Abandoned Pratt pony truss near Drummond.
18. Wolf Creek 60-foot Pratt pony truss span built in 1910 southwest of Douglas.
19. Wolf Creek Queen-post truss built in 1904 located southwest of Douglas.

Flood events where vehicles stall and require swift water rescues create a problem for Garfield County officials and first responders. At the point where water starts entering homes, flooding is considered a severe event. Water entering homes creates serious problems whether it is 1/2 inch or three inches. Severe damage to floors, walls and contents is difficult to repair and repeated flooding often causes mold and long-term damages. Garfield County, Breckinridge, Carrier, Drummond, Enid, Lahoma, Waukomis, Cimarron PS, Drummond PS, Waukomis PS, and Autry Technology Center officials consider rainfall of one inch per hour a minor severity, and anything over three inches per hour a major event that can cause severe flooding problems from drainage.

## Previous Occurrences

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Garfield County has had past occurrences of flooding, both riverine and flash flooding. The following table lists flood events over the last 10 years based on information from the Garfield

County Emergency Management Department and NCDC. The most damaging flood in Garfield County was July 19, 1997 when slow moving nighttime thunderstorms passed through the county. The ground in much of Garfield County was already saturated from earlier rain. Turkey Creek, Indian Creek, and Sand Creek and their tributaries that normally only contain a foot of water swelled to 8-10 feet deep in less than three hours. Nine bridges in the county had to be closed due to damage to the structure or that were destroyed. In fact, a swift water rescue was necessary in Enid when a family had to be rescued from their home near Turkey Creek. Turkey Creek was also responsible for livestock deaths in the county. Estimated damage by the county officials at the time was \$1,000,000.00.

<b>Table 3-10 GARFIELD COUNTY FLOOD EVENTS</b> <b>2005 - APRIL 2014</b> <b>SOURCE: National Climate And Data Center</b>		
DATE	LOCATION	DESCRIPTION
<b>May 1, 2012</b>	Enid	<b><u>Flash Flood</u></b> - "High water closed roads in the Enid area", said Mike Honigsberg, Garfield County and Enid emergency management director. 102nd Street from State Highway 412 to Breckinridge had several places where water was in the roadway and the street was closed. On the west side of Enid, Imo Road and W Chestnut was closed due to high water Monday morning. – <b>News article from Oklahoman</b>
<b>May 23, 2011</b>	Lahoma	<b><u>Flash Flood</u></b> - Widespread severe thunderstorms, including supercells, occurred over a large area of Oklahoma during the afternoon and evening hours of the 23rd. The thunderstorms were focused near two main boundaries. One was a dry line that was set up over the western third of Oklahoma. The other was a stationary front that was draped over northern Oklahoma. More numerous thunderstorms occurred over northern Oklahoma, with more scattered development to the south. Storms began firing by midafternoon over northwest Oklahoma, with several supercells developing and merging to the east. By early evening, many of the thunderstorms persisted, although with less intensity. By midnight, the storms had all weakened below severe limits as they moved into eastern Oklahoma. Water was overflowing the streets in Lahoma, making them impassable. <b>No damage estimate was available.</b>
<b>Aug 18, 2009</b>	Kremlin to Carrier	<b><u>Flash Flood</u></b> - A stationary frontal boundary was located from the Texas panhandle, into west central



Table 3-10

**GARFIELD COUNTY FLOOD EVENTS****2005 - APRIL 2014****SOURCE: National Climate And Data Center**

DATE	LOCATION	DESCRIPTION
		and central Oklahoma during the late afternoon hours. Very unstable air was in place along and south of the boundary. Thunderstorms developed over the Texas panhandle and developed eastward along the boundary. The combination of the very unstable air and decent vertical wind shear allowed for some of the thunderstorms to become better organized, with severe weather reported over parts of west central into central Oklahoma. Later in the evening, additional thunderstorms developed north of the boundary as the low-level jet developed. Severe weather was reported over parts of northern Oklahoma, mainly in the form of strong winds and very heavy rainfall. Highways 45 and 81, north and west of Enid, were closed due to water running over top of them. Several county roads were also closed in these areas due to high water. <b>No damage estimate was available.</b>
<b>Aug 16, 2009</b>	Carrier to North Enid	<b><u>Flash Flood</u></b> - A cold front moved into northwest Oklahoma during the morning and early afternoon hours before becoming stationary. Thunderstorms developed over mainly northern Oklahoma early in the evening, as a weaker cap and more favorable wind shear were located. Farther west, a stronger cap mitigated the chances for development. The activity remained over mainly north central Oklahoma through mid-evening, with movement northeast into Kansas. Besides large hail and strong winds, heavy rainfall was also a threat, as places in Garfield county reporting water over several roadways. Portions of Highway 45 and 81, as well as numerous county roads north and west of Enid, were closed due to high water. Some of the roads remained through the morning hours.
<b>Apr 26, 2009</b>	Lahoma	<b><u>Flood</u></b> - Thunderstorms developed ahead of a dry line, and then ahead of a cold front by late afternoon. Very large hail up to baseball size was reported at several locations. Later in the evening, the low-level jet developed, increasing wind shear and making the environment more conducive for tornadoes. Low-level rotation became more common with the thunderstorms, with a couple of storms over north

Table 3-10

**GARFIELD COUNTY FLOOD EVENTS****2005 - APRIL 2014****SOURCE: National Climate And Data Center**

DATE	LOCATION	DESCRIPTION
		central Oklahoma producing tornadoes. Damage was reported in the northern Enid and Hillsdale areas, but no significant injuries were reported. The storms moved northeast into Kansas after midnight. Water is the over Highway 412 east of Lahoma.
<b>Sep 8, 2009</b>	Enid	<b><u>Flood</u></b> - A stationary front was located over northwest Oklahoma and extended down into parts of the Texas panhandle. Afternoon heating along the outflow boundaries allowed scattered thunderstorms to develop. Some of these thunderstorms became severe. Later in the evening, showers and thunderstorms with intense heavy rain developed over the southern Texas panhandle and moved northeast between the stationary front and stationary outflow boundary. With the high rainfall rates, flash flooding occurred. The area of precipitation continued to move northeast before exiting northern and central Oklahoma during the mid-morning hours. Four to seven inches of rain in a short period allowed for widespread flooding in Enid. Several water rescues were necessary after motorists drove into floodwaters. Several roads in and around Enid were closed due to the rapidly rising water. Monetary damages were estimated. <b>Monetary damages of \$5,000.00 were estimated.</b>
<b>Jun 5, 2008</b>	Carrier; Lahoma	<b><u>Flash Flood</u></b> - Over Oklahoma, thunderstorms developed along and east of a dry line, that was located near the Oklahoma and Texas panhandle border. The thunderstorms took some time before becoming severe, but due to the degree of instability and wind shear farther to the east, supercell thunderstorms finally emerged. Damaging wind gusts and large hail occurred as the storms moved northeast at 45 to 60 mph. Numerous wind gusts of over 80 mph were reported, with many locations reporting wind damage as the thunderstorms passed. Heavy rainfall also occurred, with some locations receiving 3.50 to 4.50 of rain. Several roadways had to be closed due to water running over them. Highway 132 between Carrier and Hillsdale was closed due to water over the roadway. North State Road on the

Table 3-10

**GARFIELD COUNTY FLOOD EVENTS****2005 - APRIL 2014****SOURCE: National Climate And Data Center**

DATE	LOCATION	DESCRIPTION
		north side of Lahoma was also closed due to high water. <b>No monetary damages were available.</b>
<b>Jun 27, 2007</b>	Bison; Enid; Waukomis	<b><u>Flood – Flash Flood</u></b> - Continuous rainfall from slow moving thunderstorms continued to plague much of Oklahoma. Training of thunderstorms over parts of Garfield county produced extreme flash flooding with some locations receiving over seven inches of rainfall. Buffalo Creek is out of its banks and estimated to be three quarters of a mile wide at this location. Oakwood Road (NOTE: Beverly Rd. [N2850] in Waukomis) from Enid to Waukomis was closed due to high water. Wood Road (NOTE: Drummond Rd. west of Waukomis), or EW0510, was closed between HWY 132 and HWY 81 due to Turkey Creek being out of its banks at Waukomis. Several other east-west roads south of Wood Road were closed as well <b>No damage estimates were available.</b>
<b>Jun 19, 2007</b>	Hillsdale	<b><u>Flash Flood</u></b> - A widespread severe thunderstorm event occurred over much of Oklahoma from the 19th into the 20th. A weakly capped air mass, combined with a surface trough oriented northwest to southeast over Oklahoma, and afternoon heating allowed for another round of strong to severe thunderstorms to develop. Wind shear along the outflow boundary and decent instability allowed for the some of the thunderstorms to produce high winds and large hail. Also, a complex of thunderstorms developed over western Kansas and moved south toward northern Oklahoma. The low-level jet cranked up as night fell, pumping in warm and very moist air. The thunderstorm complex continued moving south while intensifying. Widespread severe winds and large hail accompanied the thunderstorms. The thunderstorm complex moved south through much of Oklahoma before moving into Texas. Several county roads were closed due to high water. <b>No damages were estimated.</b>
<b>Mar 5 2004</b>	Southern Garfield Co.	<b><u>Flood</u></b> - Numerous secondary roads near all of these creeks were flooded. Logan County and southern Garfield County were also plagued by moderate to major flooding, which occurred mainly along Skeleton

Table 3-10

**GARFIELD COUNTY FLOOD EVENTS****2005 - APRIL 2014****SOURCE: National Climate And Data Center**

DATE	LOCATION	DESCRIPTION
		Creek. Storm total precipitation amounts of 4 to 6 inches were observed in the area, and generating tremendous runoff and resulting in flash flooding and flooding. At the USGS river gage site 3 miles east of Lovell, OK on OK State Highway 74, Skeleton Creek rose above a flood stage of 35 feet at 4:30 pm CST on March 4 and did not fall below flood stage until 2 am CST on March 6. Skeleton Creek crested at 44.5 feet, 9.5 feet above flood stage at 3 am CST on March 5, making it the fifth highest crest of record. <b>No damages were estimated.</b>

**TOWN OF CARRIER:** Carrier is victim to occasional flash flooding. The road shown below along Turkey Creek is susceptible to flash flooding.



The Town of Carrier is flat terrain like most of Garfield County and adequate street drainage is a problem when heavy rains occur.

**TOWN OF DRUMMOND:** Drummond is not one of the communities listed in the Garfield County Flood Events from NCDC however; Drummond members of the GCHMPT indicated Drummond does have a flash flooding problem. The bridge shown below is one area of flooding north of town that is being resolved by the Oklahoma Department of Transportation.





Drummond is a small rural agriculture based



Workers salvage metal from the old Bruce Perry Memorial Bridge after the Oklahoma Department of Transportation closed Oklahoma 132 four miles north of Drummond, as crews demolish the bridge over Turkey Creek on Wednesday. Completion of the new bridge is slated for May 2014. Individuals living in the area have access to other county roads during construction. (Staff Photo by BONNIE VCULEK)

Picture from Enid News & Eagle Jan. 15, 2014 ↑



Drummond is a small rural agriculture based town in western Garfield County with inadequate drainage. The above picture is Main Street Drummond and there is little to no drainage to handle heavy rainwater. The second picture is at the Drummond School building. The



Superintendent who is an active member of the GCHMPT has indicated they have flash flooding problems at the school. Drainage ditches often overflow into parking lots when heavy rains occur. School buses from Drummond can also have high water problems at areas on their routes. He indicated there are also businesses and houses in town that

sometimes flood when they receive heavy rains.



**THE CITY OF ENID** is susceptible to flooding primarily flash flooding in low-lying areas although there is occasional flooding. The picture at the right is an underpass on North Grand Avenue in Enid which has had flooding problems for decades. Various attempts have been made to alleviate the problem but have been unsuccessful.



Enid also occasionally experiences flooding from Boggy Creek which passes through the center of town. According to Enid/Garfield County Emergency Management, Boggy Creek flooded extensively in the 1970's but that since that time the creek has been deepened and is not as major a threat as it once was. He did indicate another major rain when the ground is already saturated and the creek is full, could possibly cause another flood from the creek. A member of the

GCHMPT

indicated there

is occasional flash flooding near St. Mary's Hospital from Boggy Creek. Another member from Enid also indicated flash flooding problems at the creek east of the hospital. The picture showing the creek depth is southeast of the hospital.



The City of Enid is a participant in the Community Rating System (CRS) which recognizes and encourages community floodplain management activities that exceed the minimum NFIP standards. Depending upon the level of participation, flood insurance premium rates for policyholders can be reduced up to 45%. Besides the benefit of reduced insurance rates, CRS floodplain management activities enhance public safety, reduce damages to property and public infrastructure, avoid economic disruption and losses, reduce human suffering, and protect the environment. Technical assistance on designing and implementing some activities is available at no charge. Participating in the CRS provides an incentive to maintaining and improving a

community's floodplain management program over the years. Implementing some CRS activities can help projects qualify for certain other Federal assistance programs.

For CRS participating communities, flood insurance premium rates are discounted in increments of 5% (i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount (a Class 10 is not participating in the CRS and receives no discount)). The CRS classes for local communities are based on 18 creditable activities, organized under four categories:

1. Public Information
2. Mapping and Regulations
3. Flood Damage Reduction and
4. Flood Preparedness

The table below shows the credit points earned, classification awarded and premium reductions given for communities in the NFIP CRS.

<b>Credit Points</b>	<b>Class</b>	<b>Premium Reduction SFHA*</b>	<b>Premium Reduction Non-SFHA**</b>
4,500+	1	45%	10%
4,000 – 4,499	2	40%	10%
3,500 – 3,999	3	35%	10%
3,000 – 3,499	4	30%	10%
2,500 – 2,999	5	25%	10%
2,000 – 2,499	6	20%	10%
1,500 – 1,999	7	15%	5%
1,000 – 1,499	8	10%	5%
500 – 999	9	5%	5%
0 – 499	10	0	0

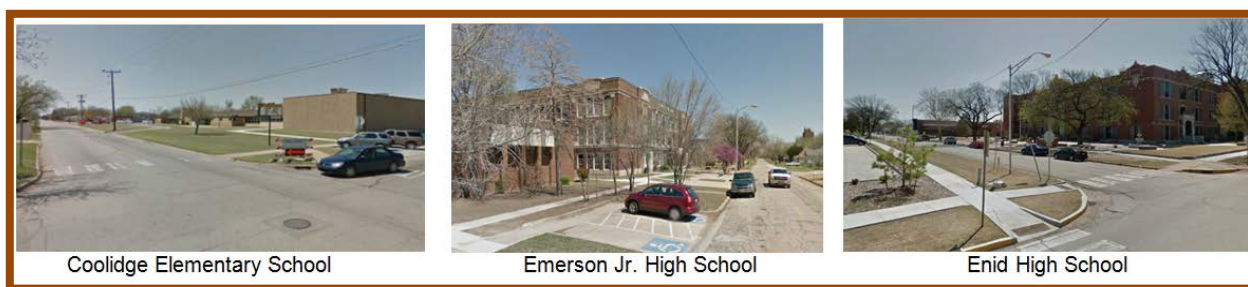
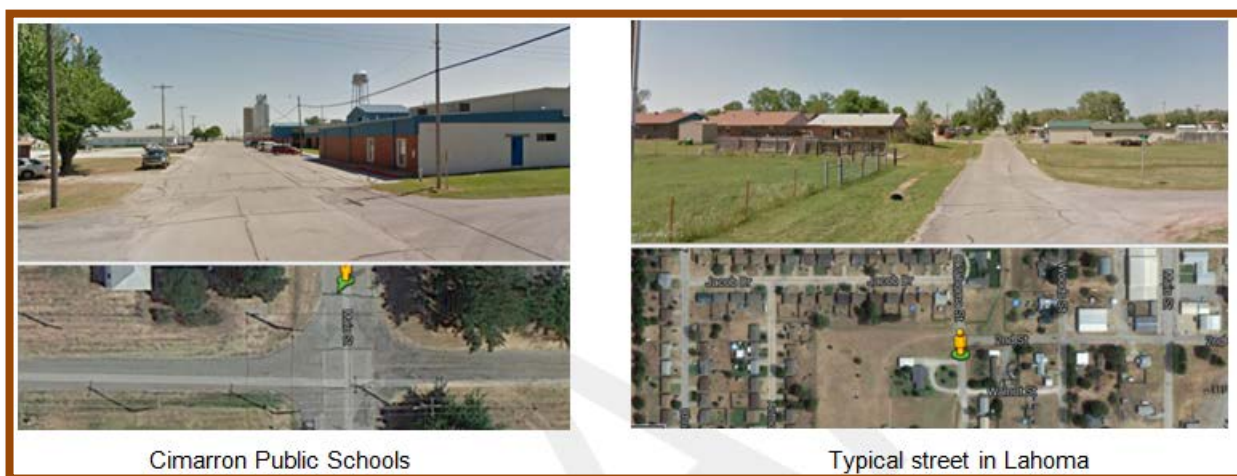
\*Special Flood Hazard Area

\*\*Preferred Risk Policies are available only in B, C and X Zones for properties that are shown to have a minimal risk of flood damage. The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies. The CRS credit for AR and A99 Zones are based on non-Special Flood Hazard Areas (non-SFHAs) (B, C and X Zones). Credits are: classes 1-6, 10% and classes 7-9, 5%. Premium reductions are subject to change.

The City of Enid holds a class 8 rating in the Community Rating System.

Drainage in Enid is better than in many Garfield County communities. The schools in Enid seldom experience flood problems because the drainage is better. School bus drivers from Enid can be impacted on their routes due to high water covering rural roads or low water bridges.

**TOWN OF LAHOMA:** Lahoma is located in far western Garfield County west of Enid and like most of Garfield County is a flat rural farming town. The town suffers from inadequate drainage along the towns streets and as a result suffers from high water when heavy rains occur. Some of the problems also occur in low areas on Highway 412 east of town which connects Lahoma with



Enid. The area below is next to Cimarron Schools in Lahoma. School buses from Cimarron Public Schools can also have high water problems in areas of their routes. Drainage can be a problem in this area again because of the flat terrain and non-existent street drainage. The flash flooding is not anticipated to get very deep because there is plenty of area for the backup to spread out.

Cimarron School is in an area of Lahoma that has inadequate street drainage. Even where there is drainage in the town, it is inadequate when heavier than normal rains come.



**WAUKOMIS:** Waukomis is a farming community located eight miles south of Enid where the



terrain is once again very flat. The drainage along many of the streets in town are inadequate during heavy rains. A few parts of town have better drainage but still experience high water at times.

The schools in Waukomis are also subject to flooding. School buses from Waukomis can also be affected on their routes by high water covering rural roads. Most of the farm roads around Waukomis are subject to flash flooding when excessively heavy rains occur.

**AUTRY TECHNOLOGY CENTER – ENID:** Autry Technology Center is located in northern Enid and is susceptible to flash flooding primarily due to the flat terrain. The potential of floodwater getting



into the building is low but is possible in extreme events.

## Probability of Future Events

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Because most of Garfield County is flat, runoff is and slowed and flash flooding can occur in almost any part of the county including most communities. Based on history however, and input of the communities and school district officials, the potential of flooding in Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis, Cimarron PS, Drummond PS, Waukomis PS, and Autry Technology Center is considered **Likely**.

## Vulnerability and Impact

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Whether from rivers and streams, or flash flooding caused by over taxed water drainage systems, flooding can still be considered a major destructive force in Oklahoma. Neither property nor lives are exempt from its ravages. In Garfield County, despite warning signs, people have driven into flooded roadways and been swept off by faster than anticipated currents or driven onto a washed out roadway “hidden” by floodwaters. Emergency Services have then been called to perform rescues. Flooding rivers and streams have invaded homes and businesses destroying floors, walls and contents causing people to have to relocate and some become unemployed due to the closure of their business. Farmers and ranchers lose thousands of dollars’ worth of wheat, cotton, sorghum, and hay, as well as livestock when floodwaters overrun their fields.

Communications towers, telephone and electric lines are above ground and are often impacted by flooding rivers or creeks. Transportation routes are always affected by floodwaters whether they are the local county roads or major highways. Garfield County has a number of main highways including Highway 412/60 that runs east to west in the county and Highway 81 that runs north and south through the county. Although seldom affected by flooding the possibility exists. Such an event would create massive transportation problems.

The impact of their losses not only affects Garfield County's economy but also the economy of northern and western Oklahoma.

The school districts in Drummond, Lahoma and Waukomis and the Autry Technology Center occasionally experience flooding problems due to inadequate street drainage and flat terrain. School buildings that become flooded have damage to storage cabinets, floor tiles and floor-mounted equipment with high repair or replacement cost. Flooded facilities become unusable space until flood waters recede and the facilities are dried out.



Most flooding affects school bus routes and creates both time and financial hardships for the schools. Flooded and washed out roads force busses to take alternate routes often using up class time and costing the districts for added fuel consumption.

## **Conclusions**

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Residents of Garfield County are watchful during heavy rain periods regarding the flood threat and the treacherous conditions caused by it. Most citizens have predetermined routes for streets they may need to use during periods of high water. New and better methods are being developed to deal with areas that have restricted drainage whether river or creeks or flash flooding caused by inadequate drainage. Ninety percent of Garfield County communities are members of the National Flood Insurance Program (NFIP): Garfield County Unincorporated; Covington; Drummond; Enid; Garber; Hunter; Kremlin; Lahoma; and North Enid. Only Breckinridge; Fairmont and Waukomis are not members. Garfield County plans to continue its mitigation battle with the floodwaters when they come and hope one day to no longer experience those problems. Some solutions to these events are listed in Chapter Four of this plan.

## **References**

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Enid/Garfield County Emergency Management  
National Climatic Data Center (NCDC) <http://www.ncdc.noaa.gov/stormevents/>  
Google Maps

## HAZARD PROFILE

### Hail

Hail forms in storm clouds when super-cooled water droplets freeze on contact with condensation nuclei, such as dust. The storm's updraft blows the hailstones to the upper part of the cloud. The updraft dissipates and the hailstones fall down, back into the updraft, and are lifted up again. The hailstone gains an ice layer and grows increasingly larger with each ascent. Once a hailstone becomes too heavy to be supported by the storm's updraft, it falls out of the cloud. This movement up and down inside the cloud, through cold then warmer temperatures, causes the droplet to add layers of ice and can become quite large, sometimes round or oval



shaped and sometimes irregularly shaped. The size ranges from smaller than a pea to as large as a softball and larger, and can be very destructive to buildings, vehicles and crops.

The National Weather Service uses a network of Nexrad Doppler radars to detect hail. Hail size and probability can be determined from radar data with a computer by different algorithms.

### Location

All of Garfield County including the unincorporated communities and the participating incorporated communities, school districts and Autry Technology Center and agricultural interests in the county are all susceptible to hail storms. Usually associated with severe thunderstorms, hail damage is a hazard for all structures, vehicles, crops and the entire population.

### Extent



Hail usually lasts an average of 10 to 20 minutes but may last much longer in some storms and is usually in relatively small coverage paths. Hail causes billions in crop and property damage each year in the U.S. Even small hail can cause significant damage to young and tender plants. The peak periods for hailstorms, late spring and

early summer, coincide with Oklahoma's most critical agricultural seasons for wheat, corn, barley, oats, rye, and fruit trees. Garfield County is primarily an agricultural area growing thousands of acres of wheat, corn, sorghum and other crops important to Oklahoma and the U.S. Livestock is also a very widespread commodity in Garfield County. Hailstorms can destroy a wheat crop or even kill livestock disrupting the economy of the entire county.

<b>Table 3-11 Combined NOAA/TORRO Hailstorm Intensity Scales</b>				
<b>Size Code</b>	<b>Intensity Category</b>	<b>Typical Hail Diameter (inches)</b>	<b>Approximate Size</b>	<b>Typical Damage Impacts</b>
H0	Hard Hail	up to 0.33	Pea	No damage
H1	Potentially Damaging	0.33-0.60	Marble or Mothball	Slight damage to plants, crops
H2	Potentially Damaging	0.60-0.80	Dime or grape	Significant damage to fruit, crops, vegetation
H3	Severe	0.80-1.20	Nickel to Quarter	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	1.2-1.6	Half Dollar to Ping Pong Ball	Widespread glass damage, vehicle bodywork damage
H5	Destructive	1.6-2.0	Silver dollar to Golf Ball	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	2.0-2.4	Lime or Egg	Aircraft bodywork dented, brick walls pitted
H7	Very destructive	2.4-3.0	Tennis ball	Severe roof damage, risk of serious injuries
H8	Very destructive	3.0-3.5	Baseball to Orange	Severe damage to aircraft bodywork
H9	Super Hailstorms	3.5-4.0	Grapefruit	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	4+	Softball and up	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

The Torro Hail scale above describes the levels of hail possible and potential damage that results. Garfield County, participating jurisdictions, public schools and Autry Technology Center considers anything in the magnitude of H2 or higher on this scale to be significant due to crop losses and the economic hardship it creates for farmers and ranchers. Once the size of hail rises to H3-H4 magnitude, it becomes disastrous to equipment that is parked outside and unprotected.

## Previous Occurrences

There have been numerous incidents of hail produced by the severe thunderstorms in Garfield County each year. NCDC reports 280 hail events in Garfield County between January 1996 and October 2013. Since 2005, 107 hail events have been reported in Garfield County with 75 with one-inch hail or larger. In interest of space, only those hailstorms with two inch hail OR which caused damage will be listed. Records are not generally kept for damages caused by hail events.

<b>Table 3-12 GARFIELD COUNTY MAJOR HAIL EVENTS</b> <b>2005 - June 2014 (1.5 inches or larger or damage)</b> <small>Source: National Climatic Data Center</small>		
<b>Date</b>	<b>Location</b>	<b>Description</b>
<b>May 15, 2013</b>	Enid (Vance AFB)	<b><u>1.90 inches</u></b> - A classic late Spring severe weather setup unfolded over the southern Plains. Rich low-level moisture and very warm temperatures contributed to high instability, while an incoming shortwave trough yielded deep-layer shear sufficient for supercells during the afternoon. Owing to the large spread between surface temperatures and dew points over most of Oklahoma, tornadoes did not occur, but significant hail was common with the storms early in their life cycles over far western Oklahoma. Later in the evening, storm outflows consolidated in some cases to produce more linear convection, transitioning the reports toward severe wind gusts farther east.
<b>Sep 26, 2012</b>	Breckinridge	<b><u>1.75 inches</u></b> - An initial round of thunderstorms developed over the eastern portions of central Oklahoma during the early afternoon hours, producing some large hail. Around sunset, numerous storms developed and overspread western and central Oklahoma, producing widespread hail reports and some damaging wind through the mid to late evening hours.
<b>May 29, 2012</b>	Drummond, Hillsdale Lahoma,	<b><u>1.00 - 1.75 inches</u></b> - Surface low developed over the Texas Panhandle through the day, lifting a stationary front northward as a warm front across Oklahoma. As the surface low deepened, a potent dryline developed over western Oklahoma. Despite somewhat marginal upper level winds for supercells, effective shear was highly supportive of sustained rotating thunderstorms which propagated east southeastward through the afternoon. Storms began during the mid to late afternoon over parts of north-central and northwest Oklahoma
<b>Apr 28, 2012</b>	Douglas; Drummond; Hillsdale; Lahoma	<b><u>1.75 inches</u></b> - Several thunderstorms developed just after sunset on April 28 along and near a stationary front from southwest to northeast Oklahoma. The most significant storms were supercells which affected central Oklahoma between 9:30pm and midnight.
<b>Apr 11, 2012</b>	Hunter	<b><u>1.75 inches</u></b> - A large complex of thunderstorms moved south-southeast across northern Oklahoma on the early morning of April 11. One thunderstorm intensified over Garfield County and resulted in a golf ball size hail report at

**Table 3-12 GARFIELD COUNTY MAJOR HAIL EVENTS  
2005 - June 2014 (1.5 inches or larger or damage)**

Source: National Climatic Data Center

Date	Location	Description
		Hunter at 2:30am CDT. This storm remained intense across parts of Garfield and Kingfisher County through 4:00am, but no additional reports were received
<b>Feb 20, 2012</b>	North Enid	<b><u>1.75 inches</u></b> - A potent, quick-moving storm system affected Oklahoma during the afternoon of the 22nd, with strong winds, small hail, and brief heavy rainfall. South winds that had developed over the southern plains tried to bring moisture northward, but quality moisture was lacking, which kept the severe thunderstorm potential more of a marginal threat. A pacific cold front began advancing east through Oklahoma during the late morning hours, with thunderstorms developing over parts of west-central Oklahoma by early afternoon. The thunderstorms were quick moving, and had moved near the I-35 corridor by 3 to 4 pm. Sporadic marginally severe hail was reported.
<b>Sep 17, 2011</b>	Drummond; Enid	<b><u>1.25 - 1.75 inches</u></b> - A warm front moved slowly north through Oklahoma, settling near the Oklahoma and Kansas border by mid-afternoon. Scattered thunderstorms developed over western and northern Oklahoma, with another area of thunderstorms developing near the Red River. The thunderstorms produced large hail and heavy rain as they moved east and northeast. One thunderstorm, however, remained discrete and moved east and then east-southeast over north-central Oklahoma. Backed surface winds near the warm front helped maximize low-level wind shear, and three brief tornadoes developed over open country in Grant county. The northern Oklahoma storms merged into a complex.
<b>May 23, 2011</b>	Enid	<b><u>1.75 inches</u></b> - Widespread severe thunderstorms, including supercells, occurred over a large area of Oklahoma during the afternoon and evening hours of the 23rd. The thunderstorms were focused near two main boundaries. One was a dry line that was set up over the western third of Oklahoma. The other was a stationary front that was draped over northern Oklahoma. More numerous thunderstorms occurred over northern Oklahoma, with more scattered development to the south. A very unstable air mass was in place, and a well timed shortwave was rounding a trough in southwest flow toward Oklahoma and northern Texas. Storms began firing by mid-afternoon over northwest Oklahoma, with several supercells developing and merging to the east. Other supercell storms developed over western and southwest Oklahoma. Very large hail occurred with the storms. One supercell produced a six-inch diameter hailstone, the largest in Oklahoma history. By early evening, many of the thunderstorms persisted, although with less intensity. A boundary left over from the northern Oklahoma storms was draped over central Oklahoma. The development of the low-level jet aided in the development of supercell thunderstorms with large hail.



Table 3-12

## GARFIELD COUNTY MAJOR HAIL EVENTS 2005 - June 2014 (1.5 inches or larger or damage)

Source: National Climatic Data Center

Date	Location	Description
Apr 8, 2011	Breckinridge; Enid; Fairmont	<b>1.75 - 2.50 inches</b> - A weak cold front slipped into northern Oklahoma during the early morning hours of the 8th. Meanwhile, a dry line sharpened up near the Oklahoma/Texas panhandle border. Gulf moisture streamed north, with low to middle 60 dew point temperatures in place by late afternoon to the east of the dry line. The cold front had become stationary, providing another focus for afternoon thunderstorms. The cap that was in place for much of the day weakened sufficiently for thunderstorms to develop over the western third of Oklahoma. Instability and wind shear were already in place, and a weak upper level disturbance moved northeast from west Texas during peak heating hours. Supercell thunderstorms moved northeast, with very large hail to the size of baseballs and strong winds reported along their path.
Jun 3, 2010	Hayward; Lucien - (unincorporated)	<b>1.25 inches</b> - Thunderstorms developed during the late afternoon along a cold front, and briefly became severe across southwest Oklahoma. Golf ball size hail was reported over Jackson county. Later in the evening, more storms developed along the northern portion of the front, and one storm produced marginally severe hail. No damage was reported. The hail was reported near Lucien
May 30, 2010	Enid; Vance AFB	<b>1.75 - 2.50</b> - Severe thunderstorms developed along a cold front during the late afternoon. Hail up to tennis ball size was reported with the thunderstorms. No damage was reported. The hail in Enid was reported at the northwest side of town.
May 12, 2010	Hillsdale	<b>1.75 inches</b> - Several supercell thunderstorms with large hail and tornadoes affected much of western Oklahoma during the late afternoon and early evening. The storms evolved into a squall line that brought numerous reports of severe weather, including particularly damaging winds and hail. Damage to the area wheat crop was also reported. Monetary damage estimates were not available.
May 10, 2010	Fairmont; Garber; Vance AFB; Waukomis	<b>1.25 - 2.50</b> - A significant outbreak of severe thunderstorms and tornadoes affected a large part of northern, central, and southern Oklahoma. Tornadoes were most numerous across central and southern Oklahoma, with significant damage occurring over many areas. Severe thunderstorms erupted by mid- afternoon across northern and western Oklahoma. Given the potent combination of ingredients in place, storms began to produce tornadoes quickly after initiation. Storm motions of 50 to 60 mph were common.
Aug 26, 2009	Drummond	<b>1.75 inches</b> - Thunderstorms developed during heating of the afternoon over parts of Southern Oklahoma. Temperatures reached into the 90s, making temperature-dew point spreads on the order of 30-40 degrees. Instability was minimal, but a few thunderstorms were able to produce very strong winds, causing some minor damage in Stephens County. At the same time, numerous thunderstorms developed ahead of a cold front that moved into northwest Oklahoma during the

**Table 3-12 GARFIELD COUNTY MAJOR HAIL EVENTS  
2005 - June 2014 (1.5 inches or larger or damage)**

Source: National Climatic Data Center

Date	Location	Description
		afternoon hours of the 26th. These thunderstorms developed through the evening hours, with the aid of convergence along the front, and lift associated with an upper level storm system moving through the central plains. The thunderstorms formed into several complexes due to the presence of numerous outflow boundaries.
<b>Aug 16, 2009</b>	Hillsdale	<b>1.25 inches</b> - A cold front moved into northwest Oklahoma during the morning and early afternoon hours before becoming stationary. Thunderstorms developed over mainly northern Oklahoma early in the evening, as a weaker cap and more favorable wind shear were located. Farther west, a stronger cap mitigated the chances for development. The activity remained over mainly north central Oklahoma through mid-evening, with movement northeast into Kansas. Besides large hail and strong winds, heavy rainfall was also a threat, as places in Garfield county reporting water over several roadways.
<b>July 18, 2009</b>	Garber	<b>1.75 inches</b> - Isolated thunderstorms developed across northern Oklahoma during the afternoon. The most intense storms produced golf ball size hail near Enid. This thunderstorm moved south toward Guthrie and northern Oklahoma City, producing marginally severe hail.
<b>May 13, 2009</b>	Enid; North Enid; Carrier	<b>1.00 - 1.75 inches</b> - A cold front moved south into Oklahoma during the evening of the 13th and early on the 14th. Widespread thunderstorms developed over much of the eastern two thirds of Oklahoma. Deep moisture and favorable atmospheric conditions allowed for thunderstorms to become severe along and south of the cold. A strong cap over western Oklahoma didn't allow for much development, although thunderstorms were able to develop west during the late evening hours. All forms of severe weather developed as several supercell thunderstorms developed. Hail up to baseball size, wind gusts over 60 mph, and four tornadoes were reported as the evening progressed. Quarter- to golf ball-size hail was reported.
<b>Apr 29, 2009</b>	Carrier; Enid	<b>1.75 inches</b> - Thunderstorms developed ahead of a dry line, and then ahead of a cold front by late afternoon. Very large hail up to baseball size was reported at several locations. Later in the evening, the low-level jet developed, increasing wind shear and making the environment more conducive for tornados.
<b>June 3, 2008</b>	Hillsdale	<b>1.75 inches</b> - Thunderstorms developed east of a dry line and near a retreating warm front during the late afternoon hours. The thunderstorms quickly became supercells as they moved east. Extremely large hail and severe wind gusts were reported as the storms moved east. The hail was reported by a University of Oklahoma research meteorologist.
<b>May 24, 2008</b>	Douglas	<b>2.75 inches</b> - An outflow boundary from overnight thunderstorms was located over parts of northern Oklahoma, roughly from southern Alfalfa county to northern Lincoln

<b>Table 3-12      GARFIELD COUNTY MAJOR HAIL EVENTS</b> <b>2005 - June 2014 (1.5 inches or larger or damage)</b> <small>Source: National Climatic Data Center</small>		
<b>Date</b>	<b>Location</b>	<b>Description</b>
		county. Convergence along this boundary and afternoon heating allowed thunderstorms to develop during the mid-afternoon near and north of the outflow boundary. The most intense thunderstorms developed along the boundary, with less intense thunderstorms just to the north. The supercell thunderstorms that developed along the boundary moved very slowly east.
<b>Aug 9, 2007</b>	Bison (unincorporated)	<b>1.75 inches</b> - A cluster of showers and thunderstorms developed over parts of central and south central Kansas during the late evening hours of the 8th and early morning hours of the 9th. These thunderstorms produced an outflow boundary that pushed south into northern Oklahoma. Thunderstorms developed along the boundary, with some briefly becoming severe. The main impacts were strong winds and large hail, although the slow movement of the storms contributed to very heavy rainfall. Monetary damages were estimated.
<b>Jun 16, 2007</b>	Carrier; Hillsdale	<b>1.75 inches</b> - A widespread severe thunderstorm event occurred over much of Oklahoma from the 19th into the 20th. A weakly capped air-mass, combined with a surface trough oriented northwest to southeast over Oklahoma, and afternoon heating allowed for another round of strong to severe thunderstorms to develop. Wind shear along the outflow boundary and decent instability allowed for the some of the thunderstorms to produce high winds and large hail. Also, a complex of thunderstorms developed over western Kansas and moved south toward northern Oklahoma. The low-level jet cranked up as night fell, pumping in warm and very moist air. The thunderstorm complex continued moving south while intensifying. Widespread severe winds and large hail accompanied the thunderstorms. The thunderstorm complex moved south through much of Oklahoma before moving into Texas.

## Probability of Future Events

Garfield County properties jurisdictions, schools and people are vulnerable to hail storms. According to the Oklahoma Climatological Survey, Garfield County typically, experiences about four events each year of hail exceeding one inch in diameter. Damage usually occurs to structural glass, roofs and to vehicles. The GCHMPT considered the probability of future events based on previous experience and concluded that severe thunderstorms with hail were indeed an existing hazard for the future. As information collection improves, both the number of reported tornadoes and the number of severe hail events have increased. There is no doubt the entire county is at risk from hail and the probability of future events in Garfield County, participating jurisdictions, public schools and Autry Technology Center is **Highly Likely**.

## Vulnerability and Impact

While the stronger hail events tend to be associated with severe thunderstorms, and often damage to structures, vehicles and crops, livestock and wildlife, smaller less intense thunderstorms frequently produce smaller hail, (based on the NOAA/TORRO Hailstorm Intensity Scale, which usually only causes damage to young agricultural crops which can affect future crop yield.



Hail damage to roofs of structures causes roofs to be replaced more frequently than the normal life of roofing material, thus costing insurance companies and property owners millions of dollars annually. Property owners on occasion, especially those living in mobile homes, may have to find temporary housing. Business owners may experience sufficient damage to the roof and glass of their business may find it necessary to close until damages can be repaired. For businesses this causes a loss of business and in extreme cases could affect employee jobs. In addition to damage to structures, vehicles and crops, livestock and wildlife also are at risk by hailstorms which can cause an economic loss.

The most vulnerable asset for the public schools are the students and staff at risk from injury or death if struck by a hail stone. Windows, especially large opening windows, roofs and roof mounted equipment such as HVAC, exhaust fans, skylights, and security cameras are vulnerable to hail strikes and are expensive to repair or replace. School busses and bus windows are vulnerable to hail strikes and expensive to repair/replace.

## Conclusion

Garfield County the participating incorporated communities, school districts and Autry Technology Center is susceptible to hail storms that cause local residents thousands of dollars in damages annually. Little can be done to mitigate damages to crops or livestock, but thanks to technology, mitigation for residents and structures is available today. Window film or hail resistant roofing materials can help alleviate the effects of hail on structures. Garfield County will continue to address the problem of hail damage through assistance of the Hazard Mitigation

Program. Early warning research is ongoing through the National Weather Service (NOAA) and the Oklahoma Climatological Survey to improve warning and threat information to the public.

## References

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NCDC - National Climatic Data Center (<http://www.ncdc.noaa.gov/stormevents/>)

OCS - Oklahoma Climatological Survey (<http://climate.mesonet.org/>)



## HAZARD PROFILE

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### High Winds

Thunderstorms occur when moist air near the ground becomes heated, especially in the summer, and rises, forming cumulonimbus clouds that produce precipitation. High winds are usually a part of a thunderstorm, although it is possible for them to occur without a thunderstorm.

Wind is defined as the motion of air relative to the earth's surface. The National Weather Service issues High Wind Warnings when sustained winds of 40 mph or more are expected for 1 hour or longer, or for wind gusts of 58 mph or more with no time limit. A High Wind Watch is issued when these conditions may be met 12 to 48 hours in the future. High Winds are winds that reach speeds of 50 mph or greater, either sustained or gusting. They are a common feature of thunderstorms, particularly severe thunderstorms. The National Weather Service uses winds in excess of 58 mph as one of the measurements in determining a thunderstorm to be severe. High winds can result from thunderstorm inflow and outflow, or downburst winds when the storm cloud collapses, and can result from strong frontal systems, or gradient winds (high or low-pressure systems) moving across Oklahoma.



### Location

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All of Garfield County including the unincorporated communities and the participating incorporated communities the school districts, Autry Technology Center and agricultural interests in the county are all susceptible to the threat of High Wind.

### Extent

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High Winds are experienced throughout Oklahoma where people and property are exposed to the elements. They have caused heavy damage to buildings and power supplies. Winds in excess of 58 miles per hour are also cause for concern due to the threat to mobile homes and small outbuildings.

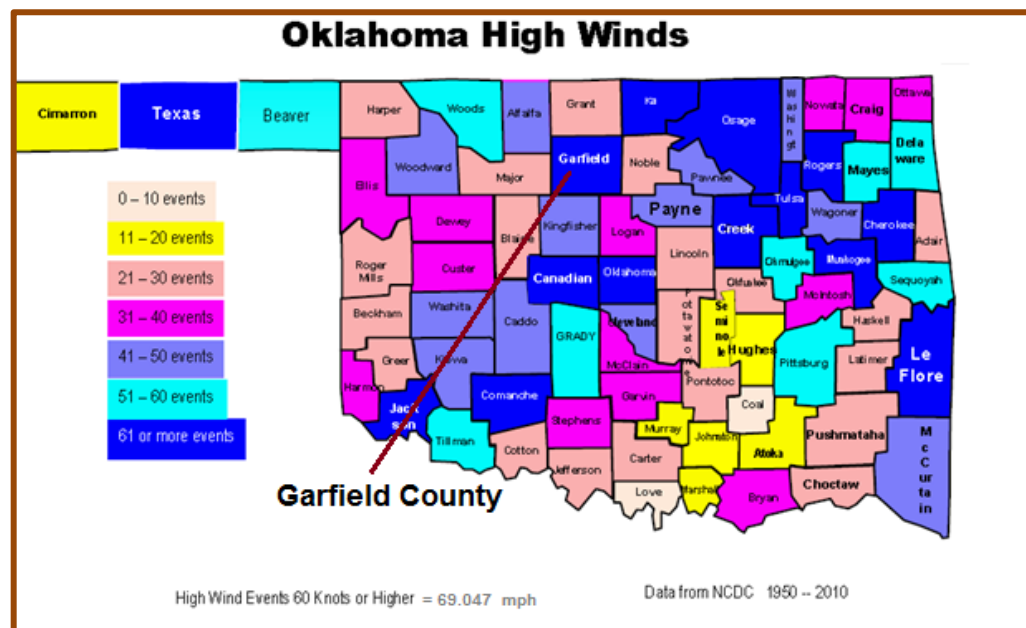
The table following from the Breckinridge Mesonet site shows the percentage of time the wind is blowing from each of the 16-point compass headings, and the percent of time the prevailing wind is recorded in each speed bin.

Maximum Gust: 66.5 mph  
Maximum Sustained: 49.2 mph  
Overall Average Speed: 10.7 mph

BREC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Totals
Calm																	0.6%
1- 5 mph	0.6	0.7	0.8	0.8	1.0	1.0	1.1	0.9	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	12.5%
6-10 mph	2.4	2.3	2.2	1.9	2.1	2.6	3.4	4.1	4.0	2.5	1.4	1.0	0.9	1.1	1.5	2.1	35.6%
11-15 mph	2.4	2.1	1.4	1.0	0.8	1.0	2.2	3.9	4.6	3.0	1.3	0.5	0.3	0.5	1.3	2.0	28.2%
16-20 mph	1.8	1.2	0.5	0.2	0.2	0.2	0.5	1.5	2.9	2.4	0.9	0.2	0.1	0.3	0.7	1.1	14.6%
21-25 mph	1.0	0.4	0.1	0.0	0.0	0.0	0.1	0.3	1.2	1.4	0.4	0.1	0.0	0.1	0.3	0.7	6.2%
26-30 mph	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.1	0.0	0.0	0.0	0.1	0.2	1.8%
31-35 mph	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4%
35+ mph	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1%
Totals	8.6	6.7	5.0	4.1	4.0	4.9	7.3	10.8	13.8	10.6	4.9	2.6	2.1	2.7	4.5	6.8	100.0%
BREC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
Max Gust	61	67	56	51	56	46	59	59	56	66	54	55	58	57	66	63	
Max 5 Min	46	49	38	34	35	40	44	44	38	42	43	43	44	40	47	49	
Avg Speed	13.0	11.1	8.9	8.1	7.3	7.5	8.6	10.3	12.2	13.5	11.3	8.1	7.2	8.8	11.0	12.4	

Garfield County experiences 31-40 high wind events on average annually (map below). A wind

speed is the rate of the motion of the air on a unit of time. It can be measured in a number of ways. In observing, it is measured in knots, or nautical miles per hour. The unit most often used in the United States is miles per hour.



The **Beaufort Wind Scale** is a system of estimating and reporting wind speeds. It is based on the Beaufort Force or Number, which is composed of the wind speed, a descriptive term, and the visible effects upon land objects and/or sea surfaces. The scale was devised by Sir Francis

Beaufort (1777-1857), hydrographer to the British Royal Navy. This system was developed for sailors, but has since been modified by the National Weather Service for use on land.

Garfield County, participating jurisdictions, public schools and Autry Technology Center officials consider anything higher than a force 10 on the Beaufort Scale to be severe and warrant high wind warnings due to the potential of loose flying debris.

<b>Table 3-13 Beaufort Wind Scale for Land</b>				
<b>No.</b>	<b>Knots</b>	<b>mph</b>	<b>Description</b>	<b>Effects on land</b>
<b>0</b>	0	0mph	Calm	Smoke rises vertically.
<b>1</b>	1-3	1-3mph	Light air	Smoke drifts in the wind.
<b>2</b>	4-6	4-7mph	Light breeze	Leaves rustle. Wind felt on face.
<b>3</b>	7-10	8-12mph	Gentle breeze	Small twigs are in constant motion. Light flags extended.
<b>4</b>	11-16	13-18mph	Moderate wind	Dust, leaves and loose paper lifted. Small branches move
<b>5</b>	17-21	19-24mph	Fresh wind	Small trees sway.
<b>6</b>	22-27	25-31mph	Strong wind	Large branches move. Whistling in phone wires. Difficult to use umbrellas.
<b>7</b>	28-33	32-38mph	Very strong wind	Whole trees in motion.
<b>8</b>	34-40	39-46mph	Gale	Twigs break off trees. Difficult to walk.
<b>9</b>	41-47	47-54mph	Severe gale	Chimney pots and slates removed.
<b>10</b>	48-55	55-63mph	Storm	Trees uprooted. Structural damage.
<b>11</b>	56-63	64-72mph	Severe storm	Widespread damage.
<b>12</b>	63	73mph	Hurricane force	Widespread damage. Very rarely experienced on land.

## Previous Occurrences

There are many thunderstorm events across Oklahoma each year, most bringing welcome



precipitation but many containing high winds which sometimes cause significant damage, injury, or even deaths. Many high wind events occur causing no damage or only tree damage. (Those are not listed in the following table.) NCDC lists 217 high wind and thunderstorm wind events in Garfield County since

1950 (previous edition), 102 of which have occurred since 2001. 39 High Wind events have

caused damage since 2001. In the interest of space, only the storms which caused structural damage of at least \$10,000 are listed in the table below. No injuries or deaths have been reported in Garfield County due to high winds.

<b>Table 3-14 GARFIELD COUNTY HIGH WIND EVENTS</b> <b>2005 –2014</b> <b>NCDC – National Climatic Data Survey</b> <b>Events experiencing winds exceeding 58 knots</b>		
<b>Date</b>	<b>Location</b>	<b>Description</b>
<b>Jun 27, 2013</b>	Enid; Vance AFB	<b><u>Thunderstorm Winds: 58 knots (66 mph)</u></b> - A large, intense squall line developed during the afternoon in central Kansas and pushed south through the evening hours. Widespread severe wind gusts, some significant, along with some severe hail occurred in north central Oklahoma. The convection weakened as it moved into central Oklahoma. Enid ASOS recorded a gust to 67 mph. <b>No damage estimate provided.</b>
<b>Jun 5, 2013</b>	Breckinridge	<b><u>Thunderstorm Winds: 71 knots (81 mph)</u></b> - An extensive squall line which originated in eastern Colorado during the late afternoon pushed through much of northern and central Oklahoma by early morning. Several reports of severe wind gusts were received throughout the area.
<b>Aug 8, 2011</b>	Fairmont; Waukomis	<b><u>Thunderstorm Winds: 61 knots (70 mph)</u></b> - A weak cold front draped from west central into northeast Oklahoma was the focus for afternoon and evening severe thunderstorms. Numerous wind gusts over 70 mph were reported, with a maximum measured gust of 96 mph reported near Lahoma. Widespread wind damage was reported. A large portion of the roof at the Lutheran Church was destroyed. Monetary damages were estimated. <b>Estimated damages \$15,000.00.</b>
<b>Jul 2, 2011</b>	North Enid	<b><u>Thunderstorm Winds: 65 knots (74 mph)</u></b> - The summertime ridge of high pressure was in full force over Oklahoma. Hot temperatures near or exceeding 100 degrees allowed for thunderstorms to develop during the mid to late afternoon hours. Gusty winds and brief heavy, but beneficial rainfall were the main threats. Some of the gusts exceeded 60 mph, with some minor damage reported. The thunderstorms weakened and dissipated with the loss of daytime heating. A one-mile stretch of power poles were snapped between Breckinridge and Phillips roads, north of North 30th Street. <b>Monetary damage estimates were not available.</b>
<b>Jun 16, 2011</b>	Kremlin	<b><u>Thunderstorm Winds: 61 knots (70 mph)</u></b> - A complex of showers and thunderstorms developed over southeast Colorado and western Kansas during the afternoon hours of the 15th. The development of the low-level jet and steep mid-level lapse rates allowed the complex to maintain itself as it moved over the northern third of Oklahoma. Initially, large hail was reported over northwest Oklahoma, but the threat transitioned to damaging winds and heavy rain. <b>Monetary damage estimates were not available.</b>
<b>Jun 11, 2011</b>	Carrier	<b><u>Thunderstorm Winds: 61 knots (70 mph)</u></b> - The front that had waffled over Oklahoma for three four days began slowly lifting north as a warm front. Several areas of showers and thunderstorms developed near and just north of the front. A couple of the storms were able to maintain themselves, developing supercell

Table 3-14

## GARFIELD COUNTY HIGH WIND EVENTS 2005 –2014

NCDC – National Climatic Data Survey  
Events experiencing winds exceeding 58 knots

Date	Location	Description
		characteristics, with very large hail and damaging winds. Several tree limbs three to four inches in diameter were blown down. An arm from a railroad crossing sign was blown off. <b>Monetary damage estimates were not available.</b>
Jun 9, 2011	Enid	<b>High Winds: 57 knots (65 mph)</b> - The same front and dry line that helped with the development of thunderstorms on the 8th was the main player for additional development during the evening hours of the 9th. The front entered far northwest Oklahoma, with a dry line extending south through the eastern Texas panhandle. Thunderstorms developed early in the evening, and with the large dew point depressions, strong downburst winds were reported. As the thunderstorms dissipated during the mid to late evening, a second night of heat bursts occurred, with damage reported in and around the Enid area. The non-thunderstorm severe wind gust was the result of a heat burst. A wind gust of 66 mph was measured at Enid's Woodring Municipal Airport. A semi was blown onto its side on US 412 between 114th and 102nd Streets. The driver of the truck was uninjured. Farther west from the airport, approximately 50 high-line power poles were snapped over a mile and a half stretch along Rupe Avenue, beginning at Garland Road. A tree fell on a car along Rupe Avenue. The driver of the vehicle escaped without injury. As many as 520 residents were without power for a short time. Vance Air Force Base located 4 miles SSW of Enid measured several non-thunderstorm severe wind gusts. The measured gusts were 71 mph - 76 mph. <b>Storm monetary damages of \$375,000.00 were estimated.</b>
Sep 15, 2010	Drummond	<b>Thunderstorm Winds: 61 knots (70 mph)</b> - A plume of warm and very moist air moved north and west over Oklahoma. A strong cap had developed over the panhandles and into western Oklahoma. However, a strong mid-level wave arrived during the peak heating hours, allowing for enough erosion of the cap for widespread thunderstorms to develop from west-central into north-central Oklahoma. Many of the thunderstorms became severe, and large hail, up to golf-ball size, was reported over several areas, with one strong wind gust reported. No damage was reported with the wind gust.
May 12, 2010	Enid	<b>Thunderstorm Winds: 61 knots (70 mph)</b> - Several supercell thunderstorms with large hail and tornadoes affected much of western Oklahoma during the late afternoon and early evening. The storms evolved into a squall line that brought numerous reports of severe weather, including particularly damaging winds and hail. A few locations that had received damage from the May 10 tornadoes saw additional damage. <b>Estimated monetary damages = \$5,000.00.</b>
Apr 23, 2010	Enid; Vance AFB	<b>Thunderstorm Winds: 71 knots (81 mph)</b> - A surface dry line took shape over the Texas panhandle, with numerous severe thunderstorms developing ahead the boundary. The thunderstorms remained more discrete west of the Oklahoma/Texas panhandle border, before congealing into a more linear complex by mid-



Table 3-14

## GARFIELD COUNTY HIGH WIND EVENTS 2005 –2014

NCDC – National Climatic Data Survey  
Events experiencing winds exceeding 58 knots

Date	Location	Description
		evening. The larger complex of thunderstorms moved into western Oklahoma, with some moderately severe hail and strong winds affecting several locations. Coverage of the thunderstorms lessened as the storms moved east, but the developing low-level jet kept the chance for strong winds well into the overnight hours. The line of thunderstorms took on renewed strength over northern Oklahoma, and strong winds were reported from Major into Garfield counties. Wind gusts reached as high as 80 mph over parts of Enid, resulting in some widespread damage. The peak wind gust was measured on top of the Knox building in downtown Enid. Large trees were toppled, with several limbs knocking down power lines. At least 3,500 residents were without power as a result. Other damage included fences knocked down, minor to moderate roof damage, and minor house siding damage. <b>Monetary damage estimates were not available.</b>
Apr 26, 2009	Garfield Co.	<b>High Wind: 65 knots (74 mph)</b> - Thunderstorms developed along and east of a dry line over the eastern Texas panhandle. The atmosphere was extremely unstable and wind shear was more than sufficient to support severe thunderstorms, including supercell thunderstorms. Showers and thunderstorms that developed early in the day, gave way to more severe thunderstorms by midafternoon. Severe weather of all types occurred, with numerous locations receiving very large hail. <b>No damage report provided.</b>
Apr 25, 2009	Hunter; North Enid	<b>High Wind: 65 – 75 knots (74 – 86 mph)</b> - Thunderstorms developed ahead of a dry line, and then ahead of a cold front by late afternoon. Very large hail up to baseball size was reported at several locations. Later in the evening, the low-level jet developed, increasing wind shear and making the environment more conducive for tornadoes. Low-level rotation became more common with the thunderstorms, with a couple of storms over north central Oklahoma producing tornadoes. Damage was reported in the northern Enid and Hillsdale areas, but no significant injuries were reported. The storms moved northeast into Kansas after midnight. Thunderstorm winds caused significant damage to trees and a barn. <b>No damage report was available.</b>
Aug 9, 2007	Bison	<b>Thunderstorm Winds: 61 knots (70 mph)</b> - A cluster of showers and thunderstorms developed over parts of central and south central Kansas during the late evening hours of the 8th and early morning hours of the 9th. These thunderstorms produced an outflow boundary that pushed south into northern Oklahoma. Thunderstorms developed along the boundary, with some briefly becoming severe. The main impacts were strong winds and large hail, although the slow movement of the storms contributed to very heavy rainfall. Monetary damages were estimated. A cluster of showers and thunderstorms developed over parts of central and south central Kansas during the late evening hours of the 8th and early morning hours of the 9th. These thunderstorms produced an outflow boundary that pushed south into northern Oklahoma. Thunderstorms developed along the boundary, with some briefly becoming severe.

Table 3-14

**GARFIELD COUNTY HIGH WIND EVENTS****2005 –2014****NCDC – National Climatic Data Survey****Events experiencing winds exceeding 58 knots**

<b>Date</b>	<b>Location</b>	<b>Description</b>
		The main impacts were strong winds and large hail, although the slow movement of the storms contributed to very heavy rainfall. Monetary damages were estimated.
<b>Jun 19, 2007</b>	Waukomis	<b><u>Thunderstorm Winds: 70 knots (80 mph)</u></b> - A widespread severe thunderstorm event occurred over much of Oklahoma from the 19th into the 20th. A weakly capped air mass, combined with a surface trough oriented northwest to southeast over Oklahoma, and afternoon heating allowed for another round of strong to severe thunderstorms to develop. Wind shear along the outflow boundary and decent instability allowed for the some of the thunderstorms to produce high winds and large hail. Also, a complex of thunderstorms developed over western Kansas and moved south toward northern Oklahoma. The low level jet cranked up as night fell, pumping in warm and very moist air. The thunderstorm complex continued moving south while intensifying. Widespread severe winds and large hail accompanied the thunderstorms. The thunderstorm complex moved south through much of Oklahoma before moving into Texas. Monetary damages were estimated. Five to six power poles/lines were downed due to the high wind. Minor damage was reported at Pioneer School and the fire department. <b>Monetary damages of \$25,000.00 were estimated.</b>
<b>Jun 1, 2007</b>	Enid	<b><u>Thunderstorm Winds: 61 knots (70 mph)</u></b> - <b>Surface</b> low pressure moved east into southwest Kansas by late evening of May 31st. A complex of strong to severe thunderstorms had already developed over this area, with another thunderstorm complex moving south through western Kansas. These two areas of thunderstorms combined into a severe bow echo and moved east through northern Oklahoma. Large hail, strong, damaging wind gusts, and flash flooding were the main concerns. The west facing windows at an auto dealership were blown out on the west side of town. Forty-five to fifty foot tall pine trees were uprooted. Some of the trees fell onto the roofs of some houses. Several roofs were destroyed, as well as several aluminum sheds destroyed. More than one hundred homes sustained some kind of damage. The radio tower and roof at the KLGB radio station were blown down. Thirty windshields at Speed Tech Automotive & Truck Repair were shattered. Wind damage was widespread, especially in the Enid area, where one to two million dollars in damage was done. Other monetary damages were estimated.
<b>Jul 11, 2006</b>	Waukomis	<b><u>Thunderstorm Winds: 69 knots (79 mph)</u></b> - No description available.
<b>Jun 3, 2005</b>	Vance AFB	<b><u>Thunderstorm Winds: 58 knots (66 mph)</u></b> - No description available.

## Probability of Future Events



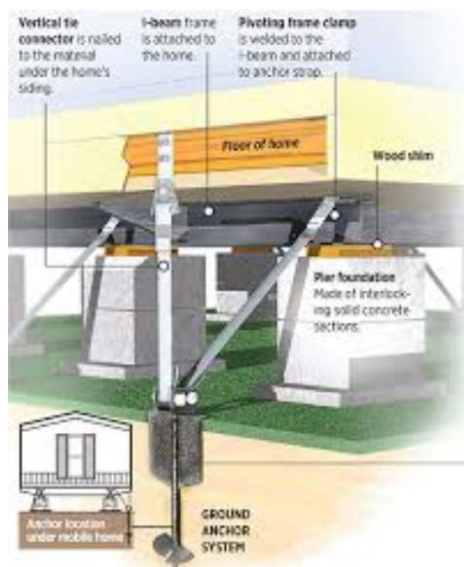
Considering past history, and the location of Oklahoma between the dry arid southwest and the moist air from the Gulf of Mexico Garfield County has significant exposure to high wind events. Damage usually occurs to infrastructure such as power transmission lines and communications towers; however, occasional damage can occur to structures. Early warning research is ongoing through the

National Weather Service (NOAA) and other organizations to improve warning and threat information for the public.

There will continue to be property damage and possibly injuries or deaths contributed to high wind events. The probability of future events in Garfield County, participating jurisdictions, public schools and Autry Technology Center is **Highly Likely**.

## Vulnerability and Impact

High winds have been responsible for wind damage to structures and crops in Garfield County and the participating incorporated communities, school districts and Autry Technology Center. Mobile homes are very susceptible to damage from high winds. They are built with fewer materials that are not as strong as in a framed structure. In addition mobile homes are off the ground (with or without axles) so the wind is able to get under the structure and upset it. "Tie downs" provide some protection but often are not adequate.



Wind damaged crops create hardship for the farmers/ranchers who experience a financial loss. Power systems are heavily affected by high winds. The state is located southeast of the Rockies which provides cool air, north of the Gulf of Mexico that provides moisture and northeast of the dry hot air from the arid southwest, allowing thunderstorms to form which cause high winds. The highest period of thunderstorms is generally through the middle to late spring months of April, May and June, which also aligns with Oklahoma's major Tornado season.

Garfield County's population and property are as vulnerable to severe thunderstorms with high winds, as any other part of the state. Damage usually occurs to infrastructure such as power transmission lines and communications towers; however, occasional damage can occur to structures.



Economic losses occur to the communities and the county when crop damages occur from wind damage. Businesses dependent on the agriculture industry the business owner experiences financial loss that causes a loss of jobs for employees of that business until the business can begin to recover. Homes that are damaged by high winds may be uninhabitable and the occupants must relocate. Other damages can occur including downed trees blocking traffic



lanes and causing power outages to critical facilities and the general population. Schools are vulnerable to damage to their facilities by high winds which can be costly to repair. In extreme damage situations, students and staff may have to be relocated to other schools or vacant buildings until the damages to the school

buildings can be accomplished.

School building roofs and roof-mounted appurtenances such as HVAC Units and vent covers are vulnerable to high winds and are expensive to repair/replace when damaged. Large windows are vulnerable to windblown debris and pose a threat to staff, students, and contents. Windows and contents are expensive to repair/replace and the threat to people could be

anywhere from light cuts and bruises to loss of life. Playground equipment not properly stowed or mounted can become flying debris or be damaged needing repaired or replaced.

## **Conclusion**

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Garfield County, and the participating incorporated communities, school districts and Autry Technology Center are susceptible to High Winds. Thunderstorm High Winds cause millions of dollars of damage throughout the United States every year. Garfield County and the participating incorporated communities, school districts and Autry Technology Center experiences high winds as outlined previously. Fortunately, most of these wind events do not cause serious damage. Minor damage such as power outages because of high winds can be inconvenient to residents and costly to repair but usually not costly to residents. More severe damage can have serious implications through loss of business and livelihood. Although limited there are action projects that can help relieve the effects of high winds on the citizens in Garfield County and described in Chapter Four.

## **References**

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NWS - National Weather Service - Norman <http://www.srh.noaa.gov/oun/>  
NCDC - National Climatic Data Center (<http://www.ncdc.noaa.gov/stormevents/>)



## HAZARD PROFILE

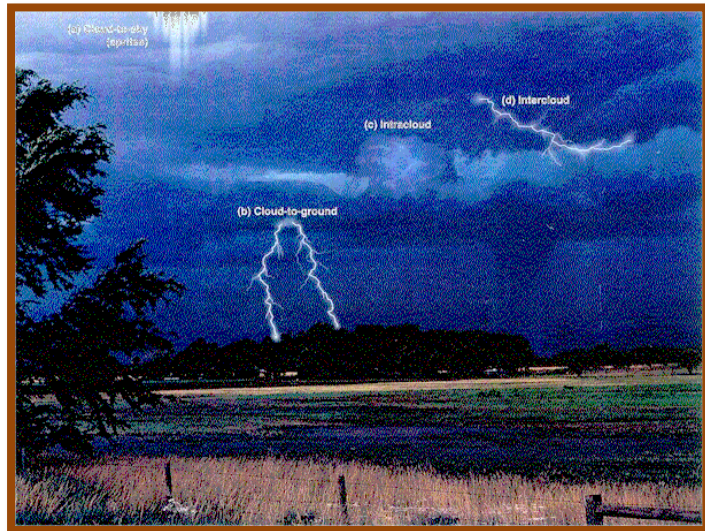
### Lightning – Garfield County



Lightning is a result of electrical charges accumulating at the base of the clouds until Lightning is discharged. Thunderstorms occur when moist air near the ground becomes heated, especially in the summer, and rises, forming cumulonimbus clouds that produce precipitation. Lightning is almost always a part of a Thunderstorm.

Air in the path of the lightning expands as a result of being heated, causing thunder. The sound produced by the electricity passing rapidly through the atmosphere causes thunder.

There are four forms of Lightning, as shown in the picture at the right: Cloud to sky, Intracloud, Intercloud and the most dangerous, Cloud to Ground.



**Cloud to Sky Lightning** is a discharge jumping from a cloud into the surrounding sky. Other forms of lightning contain elements of Cloud to Sky lightning in the forks which extend from the main strike.

**Intracloud Lightning** is the most common form of lightning, in which oppositely charged centers within the same cloud ignite and cause a bright flash within the same cloud.

**Intercloud Lightning** is lightning which occurs between oppositely charged areas of different clouds

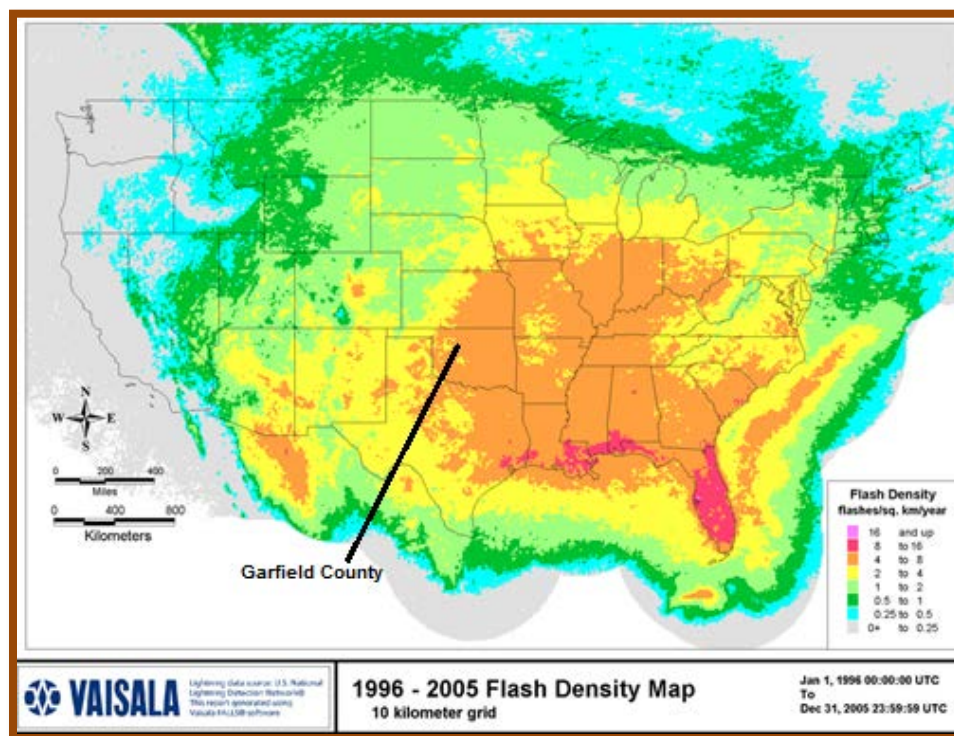
**Cloud to Ground Lightning** is the most dangerous form of lightning, in which the negatively charged bottom of the cloud travels to the positively charged ground below, or whatever object is highest, including the top of a building or a tall tree. It is not the most common form of lightning, but it is the most recognized. It is possible for positive charges to flow from higher parts of the thundercloud to the ground, though this more rare.

All types of lightning are dangerous. A single stroke of lightning has 125,000,000 volts of electricity. Lightning is a thunderstorm's number two killer each year in the U.S. In the period of 1959 – 2012 there were over 4000 lightning fatalities in the United States with 100 of that number occurring in Oklahoma ranking it number 17 in the nation.

## Location

All of Garfield County including the unincorporated communities the participating incorporated communities the school districts and Autry Technology Center are all susceptible to the threat of Lightning.

Garfield County's population and property are as vulnerable to severe thunderstorms with lightning as any other part of the state. Damage usually occurs to infrastructure such as power transmission lines and communications towers; however, occasional damage can occur to structures.



Lightning density maps provided by Vaisala. The map is for general informational and educational purposes only and is not indicative of current or future lightning activity. The 5-year Flash Density Map shows the average amount of lightning recorded in 1996-2005. The average amount of lightning

that occurs in any given area varies significantly from year to year. According to the Vaisala map, Garfield County averages 4 - 8 lightning flashes per square kilometer per year.

## Extent

Lightning is an underrated killer. It is experienced throughout Oklahoma where people and property are exposed to the elements. Lightning has caused heavy damage to buildings and power supplies. Lightning has not caused any reported deaths or injuries in Garfield County but has caused over \$ 521,000 in damage since 1996, when the NCDC began keeping records of deaths, injuries, and damage caused by lightning. The potential is there, for deaths or injuries to occur, particularly during recreational activities such as golf or fishing, both popular in Garfield County. Garfield County, participating jurisdictions, public schools and Autry Technology Center authorities consider any lightning event serious and encourage citizens to take precautions to take cover either in a vehicle or in a structure. Lightning has downed power lines causing power outages and in a few instances destroyed buildings in Garfield County. School administrators also take precautions during thunderstorms making sure students and staff members are indoors. All thunderstorms with lightning are considered dangerous because they are a serious threat to citizens.

## Previous Occurrences

There are hundreds of lightning events across Oklahoma each year, some causing significant damage, injury and even deaths. Out of these hundreds of annual strikes, NCDC lists sixteen damaging lightning strikes in Garfield County since 1996. The storms listed caused structural damage.

Table 3-15 <b>GARFIELD COUNTY LIGHTNING EVENTS</b> <b>1996 – 2015</b> <small>Data from National Climatic Data Center</small>		
<b>Date</b>	<b>Location</b>	<b>Description</b>
<b>Oct 10, 2010</b>	Hunter	A strong storm system moved southeast through the central Plains during the late hours of the 9th and into the 10th. Thunderstorms developed first over northern Oklahoma, and then developed further south toward the Red River along and just behind the front. The First Christian Church was heavily damaged following a lightning strike. Although the building was not a total loss, a significant portion burned to the ground. The time of the lightning strike was approximate. <b>Monetary damages of \$75,000 were estimated.</b>
<b>May 23, 2007</b>	Waukomis	Thunderstorms moved over northern Oklahoma during the pre-dawn hours of the 23rd. Lightning from one of the thunderstorms caused a fire large tank fire near Waukomis. The tank housed both salt water and crude oil. <b>Damage estimate = \$50,000.</b>
<b>Oct 19, 2005</b>	Enid	Lightning struck the bell tower spire of St. Paul's Lutheran

Table 3-15

## GARFIELD COUNTY LIGHTNING EVENTS 1996 – 2015

Data from National Climatic Data Center

Date	Location	Description
		Church scattering debris up to 75 feet. Some children were in the basement, but no one was injured. <b>Damage estimate = \$100,000.</b>
<b>Jul 30, 2003</b>	Waukomis	A lightning strike started an oil tank battery fire which destroyed two oil storage tanks. <b>Damage estimate = \$50,000.</b>
<b>Mar 08, 2002</b>	Enid	A strong cold front pushed through Oklahoma during the evening of the 8th, and the early morning of the 9th. In Garfield County, four, new high-line poles were blown over at a 45-degree angle just south of Garber, and insulation was blown off a roof at the Pioneer School. Lightning struck the roof of a Walmart causing slight damage. <b>Damage estimate = \$5,000.</b>
<b>Dec 05, 1999</b>	Enid	A winter storm accompanied by heavy snow and strong winds affected northwest Oklahoma from the evening of the 4th through the early morning of the 5th. in Enid, which is in Garfield County, lightning struck the roof of a house on Rimrock Rd. producing 2 holes. <b>Damage estimate = \$3,500.</b>
<b>Sep 12, 1999</b>	Waukomis	Isolated severe thunderstorms developed in the late evening of the 11th and the early morning hours of the 12th in western Oklahoma, producing very strong winds, especially in northwest Oklahoma. In Waukomis in Garfield County, lightning struck a house, igniting a fire which destroyed about two-thirds of the house. <b>Damage estimate = \$150,000.</b>
<b>Jun 24, 1999</b>	Enid	In Enid in Garfield County, lightning struck a large tree, which then fell onto a house porch. <b>Damage estimate = \$3000.</b>
<b>Jun 09, 1999</b>	Garber	An area of showers and thunderstorms developed in the early afternoon of the 9th across north central Oklahoma, producing isolated severe weather and heavy rainfall. In Garfield County, lightning struck a tower on Highway 64, 3 miles south of Garber, knocking out phone service to several towns. <b>Damage estimate = \$15,000.</b>
<b>May 31, 1999</b>	Enid	Severe thunderstorms affected much of western Oklahoma and portions of central Oklahoma during the afternoon and evening of May 31st, and the early morning of June 1st. A shop was destroyed, and several trees were uprooted 3 miles east of Hunter. <b>Damage estimate = \$15,000.</b>
<b>May 16, 1999</b>	Enid	Severe thunderstorms formed over portions of western Oklahoma during the evening of the 16 <sup>th</sup> . In Enid, lightning struck a house causing a major fire that destroyed the house. <b>Damage estimate = \$55,000.</b>
<b>Nov 09, 1998</b>	Enid	A long line of severe thunderstorms moved across most of western and central Oklahoma during the evening of the 9 <sup>th</sup> .

Table 3-15

## GARFIELD COUNTY LIGHTNING EVENTS 1996 – 2015

Data from National Climatic Data Center

Date	Location	Description
		Lightning struck a power pole in Enid causing a power outage and a small fire. <b>Damage estimate = \$200.</b>
<b>Oct 02, 1998</b>	Enid	Thunderstorms developed over portions of central Oklahoma on the 2nd resulting in flooding across Kay and Garfield Counties and scattered reports of large hail and damaging straight-line winds. A house on Breckinridge Road in Enid in Garfield County was struck by lightning just after midnight blowing out a brick wall and starting a small fire. <b>Damage estimate = \$6,000.</b>
<b>Sep 21, 1998</b>	Enid	Severe thunderstorms developed over much of western and central Oklahoma from late morning through late evening of the 21 <sup>st</sup> . As a small tornado south of Waukomis dissipated, lightning from the same complex of thunderstorms struck a house in Enid, causing a short in the wiring, which then started a small house fire. <b>Damage estimate = \$1,000.</b>
<b>May 19, 1997</b>	Enid	Late night and early morning thunderstorms produced severe straight-line winds that resulted in tree and limb damage in parts of north-central and central Oklahoma. Lightning struck a three-story brick building on the Phillips University Campus, damaging the front and the roof. <b>Damage estimate = \$5,000.</b>
<b>Mar 23, 1996</b>	Enid	Lightning struck a tree in a residential area of Enid. The tree exploded, and pieces from the tree broke a window in a neighboring house and a car window 2 houses down the street. <b>No Damage estimate available.</b>

### Probability of Future Events

Considering history and the location of Oklahoma between the dry arid SW and the moist air from the Gulf of Mexico, Garfield County has significant exposure to lightning events. Damage usually occurs to infrastructure such as power transmission lines and communications towers; however, occasional damage can occur to structures. Early warning research is ongoing through the National Weather Service (NOAA) and other private organizations to improve warning and threat information for the public.

There will continue to be property damage and possibly injuries or deaths in the future due to lightning. The probability of future events in Garfield County, participating jurisdictions, public schools and Autry Technology Center is **Likely**.

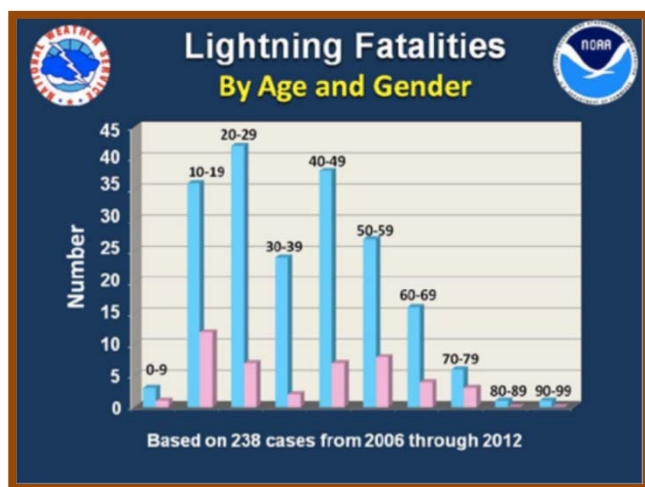


## Vulnerability and Impact

During thunderstorms and particularly severe thunderstorms, people are often injured or killed by lightning. They are struck either directly or by a nearby lightning strike resulting in injury or death. Lightning is an underrated killer and second only to flood in regard to the number of weather-related deaths in the United States each year. According to the National Weather Service, lightning causes an average of 62 deaths and 300 injuries. Garfield County has been fortunate in not having recorded any lightning related injuries or deaths in the past but lightning has been responsible for setting fires to buildings, displacing occupants. It has caused power outages due to down power lines

A new National Weather Service study recently released updated statistical information on lightning deaths in the U.S. (<http://io9.com/new-statistics-on-lightning-deaths-in-the-u-s-reveal-w-560760736>)

Those results follow:



Activity	# of Deaths ( % )
Fishing	26 ( 11%)
Camping	15 ( 6%)
Boating	14 ( 6%)
Soccer	12 ( 5%)
Beach	11 ( 5%)
Farming or ranching	11 ( 5%)
Riding bike, motorcycle, or ATV	10 ( 4%)
Social gathering	9 ( 4%)
Yard work	8 ( 3%)
Walking to/from home	8 ( 3%)
Walking to/from or waiting for vehicle	8 ( 3%)
Golf	8 ( 3%)
Total	127 ( 53%)

Garfield County officials and all of its jurisdiction and public school administrators consider all thunderstorms with lightning dangerous. Thunderstorms with lightning have damaged buildings and power supplies, and downed electrical lines causing power outages. Large trees often succumb to lightning strikes. Each year, lightning causes thousands of dollars in damages to homes, businesses, churches, barns, and other structures. Businesses are forced to close during long power outages because most cash registers are electrically powered and without lightning security risks also increase. The businesses lose business. During long-term outages of several days or weeks, even the public schools may have to close. Because of the deadly and destructive force of lightning, secondary effects from lightning are many. Examples include

forest and grass fires; explosive steam conditions in masonry, trees struck by lightning sometimes fall and knock down power/telephone lines or fall on buildings, damaging them. Electrical appliances and electronics are often destroyed by lightning causing costly repairs or replacement.

The public schools during sporting events can experience hazardous conditions for players and



spectators. During athletic events both groups are in the open without cover and with little warning of approaching thunderstorms although some do have lightning detectors. Even with warning some athletic events, especially during football season draw large crowds especially in Enid.

## Conclusion

Oklahoma has significant exposure to lightning events as does Garfield County. Governmental and private properties are both susceptible to thunderstorm related damage. Damage most often occurs to infrastructure, such as power transmission lines and communications facilities or appliances although occasional damage does occur to structures. Early warning research is ongoing through the National Weather Service (NOAA) and other private organizations to improve warning time and threat information for the public. Outdoor activities are especially susceptible to lightning strikes and early warning is important during those venues. Public education is important in lessening the effects of lightning by encouraging residents to remain inside or in their cars during lightning events. Chapter Four expresses some mitigation actions that can be taken to alleviate the threat to citizens.



## References

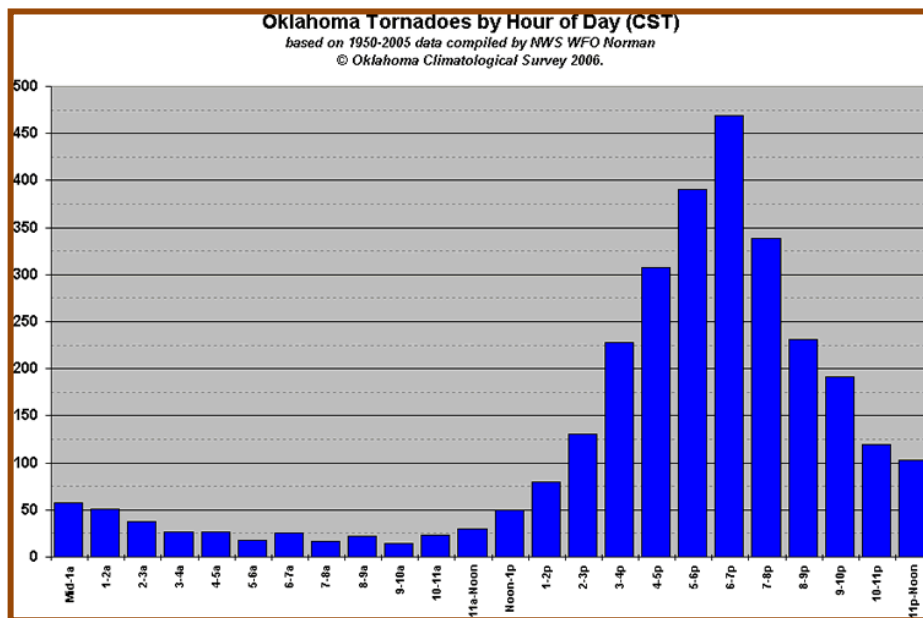
NSLI - National Lightning Safety Institute [http://www.lightningsafety.com/nlsi\\_lls.html](http://www.lightningsafety.com/nlsi_lls.html)  
NWS - National Weather Service - Norman <http://www.srh.noaa.gov/oun/>  
NCDC - National Climatic Data Center (<http://www.ncdc.noaa.gov/stormevents/>)

## HAZARD PROFILE

### Tornado – Garfield County

A tornado is a violently rotating column of air, in contact with the ground, either pendant from a **cumuliform** cloud or underneath a cumuliform cloud, and often (but not always) visible as a funnel cloud.

A tornado is spawned by a thunderstorm which is produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. The damage from a tornado is a result of the high



wind velocity and wind-blown debris. Tornado season is generally April through June in Oklahoma, although tornadoes can occur at any time of year. They tend to occur in the afternoons and evenings: over 80 percent of all tornadoes strike between 3 PM and 9 PM, but can

occur at any time of day or night.

Tornadoes are found most frequently in the United States east of the Rocky Mountains. While most tornadoes (69%) have winds of less than 100 miles per hour, they can be much stronger. Although violent tornadoes (winds greater than 205 mph) account for only 2% of all tornadoes, they cause 70% of all tornado deaths.

Tornadoes can come one at a time, or in clusters, and they can vary greatly in length, width, direction of travel, and speed. They can leave a path 50 yards wide or over a mile wide. They

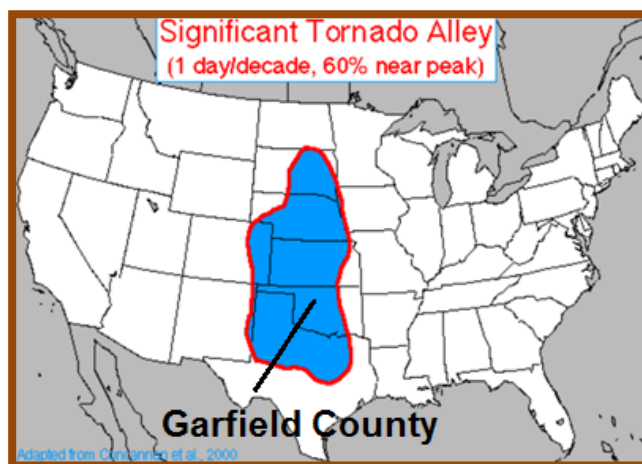


may touchdown for only a matter of seconds, or remain in contact with the ground for over an hour.

## Location

The entire state of Oklahoma, including Garfield County, its unincorporated and participating incorporated communities its school districts and the Autry Technology Center are all susceptible to the threat of tornados.

Garfield County is located in what is commonly known as “Tornado Alley” and gets its share of tornados, experiencing 79 tornados between 1875 and 2013 (NWS Norman data) probably due to its location. Due to the unique geography, that brings together cooler air from the Rocky Mountains, tropical air from the Gulf of Mexico, and dry air from the southwest. When those ingredients come together in the right proportion, tornadic thunderstorms develop. On May 3, 1999, an EF4 tornado started in Garfield County crossing into Kay and Osage Counties. Despite the large number of strong tornados in Garfield County, there has been only one recorded fatality (**1900 Kremlin**).



## Extent

Tornado wind speeds are estimated after the fact based on the damage they produce. Tornados



are categorized on a scale of EF0 (weakest) to EF5 (strongest) according to the Enhanced Fujita Scale: Garfield County may experience any of these levels at any time during the year anywhere in the county. In fact of the seventy-six tornados since 1875, Garfield County has experienced eight F-3 or EF-3 or greater tornados.

The Fujita Scale was first proposed by Dr. Fujita in 1971. It is used by meteorologists to estimate the speed of winds after a tornado by studying the damage caused by the tornado to structures.

F-Scale Number	Intensity Phrase	Wind Speed (mph)	Table 3-16 FUJITA SCALE
			Type of Damage
<b>F0</b>	Gale tornado	40-72	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages signboards.
<b>F1</b>	Moderate tornado	73-112	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
<b>F2</b>	Significant tornado	113-157	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
<b>F3</b>	Severe tornado	158-206	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
<b>F4</b>	Devastating tornado	207-260	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
<b>F5</b>	Incredible tornado	261-318	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel reinforced concrete structures badly damaged.

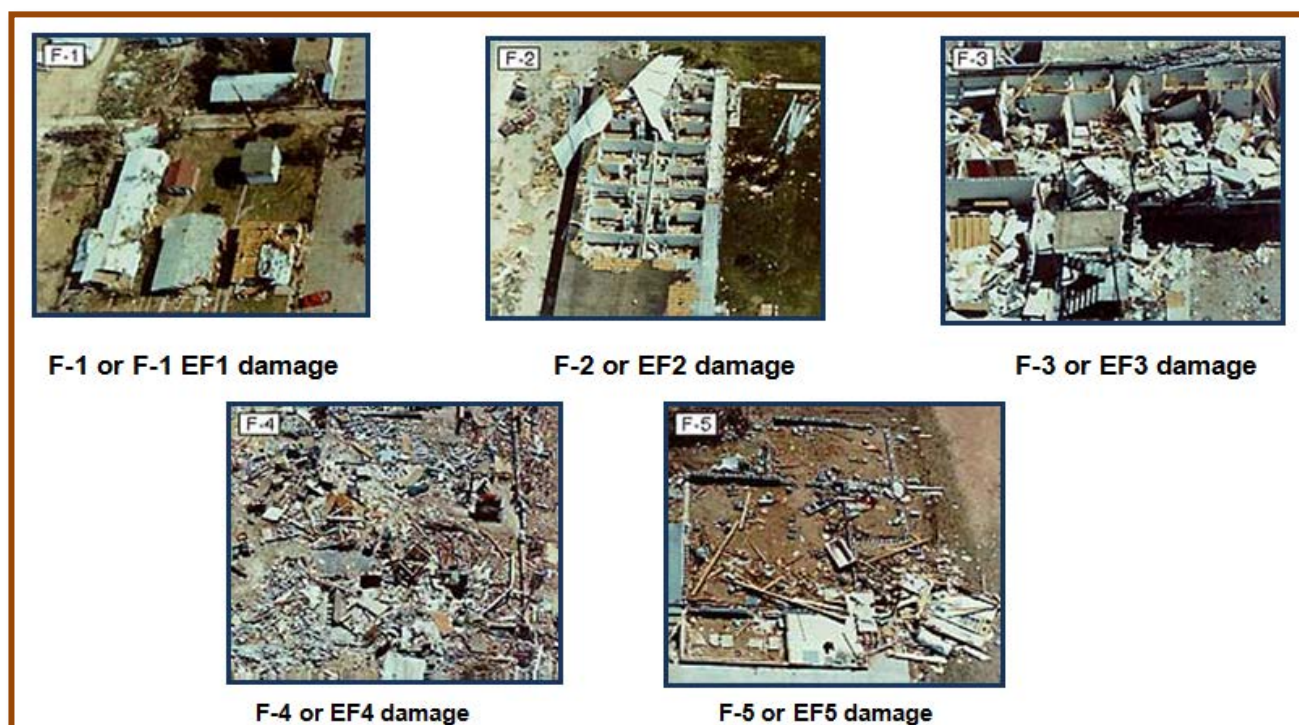
The enhanced Fujita Scale replaced the original Scale on February 1, 2007 which made wind speed estimates more accurate than the previous scale. All events from 2/1/07 are estimated using the enhanced scale. References to older storms will still rely on the original scale. Both are shown below:

Enhanced Fujita Category	Wind Speed (mph)	Table 3-17 Enhanced Fujita (EF) Scale
		Potential Damage
<b>EF0</b>	65-85	<b>Light damage</b> - Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over.
<b>EF1</b>	86-110	<b>Moderate damage</b> - Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.



<b>EF2</b>	111-135	<b>Considerable damage</b> - Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.
<b>EF3</b>	136-165	<b>Severe damage</b> - Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
<b>EF4</b>	166-200	<b>Devastating damage</b> - Well-constructed houses and whole frame houses completely leveled; cars thrown and small missiles generated.
<b>EF5</b>	>200	<b>Incredible damage</b> - Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 m (109 yd.); high-rise buildings have significant structural deformation; incredible phenomena will occur.

Since the Fujita Scale is based on damage and not wind speed or pressure, it is not perfect. The primary problem is that a tornado can only be measured in the Fujita Scale after it has occurred. Secondly, the tornado cannot be measured if there is no damage when the tornado occurs in an area without any features to be damaged. Nonetheless, the Fujita Scale has proven to be a reliable measurement of the strength of a tornado and is used in this plan for that



reason. Any tornado activity in Garfield County, participating jurisdictions, public schools and Autry Technology Center is considered severe and reason for warning and appropriate actions by emergency response personnel.

## Previous Occurrences

Oklahoma's distinction as an epicenter of Tornado Alley has become fairly well established, a result of the sheer number of tornados it has experienced. Garfield County is no exception. Since January 1999, it has experienced 6 tornado events including several events involving clusters of tornados. An increase in population spread increases the hazard posed by tornados. As the population grows, the threat of a tornado striking populated areas increased. The population growth is accompanied by the necessary infrastructure and by-products of civilization, all of which increase the potential loss in the event of a tornado.

<b>Table 3-18 GARFIELD COUNTY TORNADO EVENTS</b> <b>2000 - April 2015</b> <b>Sources: National Climatic Data Center</b> <b>National Weather Service – Norman</b>		
DATE	LOCATION	DESCRIPTION
Apr 25-26, 2009	Carrier; Enid; Hillsdale; Kremlin; North Enid	<b>EF1 – EF2-</b> Thunderstorms developed ahead of a dry line, and then ahead of a cold front by late afternoon. Very large hail up to baseball size was reported at several locations. Later in the evening, the low-level jet developed, increasing wind shear and making the environment more conducive for tornadoes. Low-level rotation became more common with the thunderstorms, with a couple of storms over north central Oklahoma producing tornados. A tornado touched down near the expo center in the northwest side of Enid. The southwest corner of the roof of the expo center was removed, and numerous trailers, trees and signs were damaged. The tornado moved north-northeast from the expo center into a neighborhood causing destroying or causing significant damage to a number of trailers, and significant damage to a metal building and trees along with some roof damage to other homes. The tornado then moved into a neighborhood on the west side of the city of North Enid damaging home roofs. The last observed damage was as the tornado crossed Phillips Avenue just east of Highway 81. A large tornado was observed by storm chasers from KWTN for over 10 minutes. Fortunately, this tornado mostly moved through open farmland with only isolated damage observed between 1 mile and 2 miles west of Kremlin. A tornado began about 3 miles south and 1 mile west of Hillsdale where a barn was destroyed just west of state highway 132. The tornado moved north-northeast through open farmland until it moved into an area southeast and east of Hillsdale where trees were damaged. Barns were damaged about one-half mile east of Hillsdale, with additional tree damage and damage to a house observed north-northeast of Hillsdale. The storms moved northeast into Kansas after midnight. <b>No damage estimate available.</b>

Table 3-18

**GARFIELD COUNTY TORNADO EVENTS****2000 - April 2015****Sources: National Climatic Data Center  
National Weather Service – Norman**

DATE	LOCATION	DESCRIPTION
May 24, 2008	Bison; Douglas; Hayward	<b>EF1 – EF2</b> - An outflow boundary from overnight thunderstorms was located over parts of northern Oklahoma, roughly from southern Alfalfa county to northern Lincoln county. Convergence along this boundary and afternoon heating allowed thunderstorms to develop during the mid-afternoon near and north of the outflow boundary. The most intense thunderstorms developed along the boundary, with less intense thunderstorms just to the north. The supercell thunderstorms that developed along the boundary moved very slowly east. Numerous tornadoes, at least eight in all, were reported with the thunderstorms. Some damage was reported with the tornados, although most remained unpopulated areas. The supercells moved east, with other thunderstorms back building to the west. Per spotter reports and damage survey, this tornado was a large multi-vortex tornado initially moving southeast, doing damage at inconsistent points along the entire width. However, the tornado did at times form a very wide single vortex which did consistent damage across the entire width. At two points in the path, there were several snapped/downed power poles with a width of 0.5-0.6 miles. However, at one of those points, two outbuildings were destroyed and significant tree damage occurred, yet the house on the property sustained no visible damage. Significant damage occurred across the entire width starting at Highway 74 going east possibly signaling a change from multiple vortices to a single vortex. At Highway 74 and Bison Rd., a singlewide mobile home that was anchored down was thrown onto Highway 74. The tornado tracked east along Bison Rd, destroying outbuildings and a false roof at one property. A horse trailer at the property was thrown about 300 yards. This short-lived tornado damaged a stone barn with a sheet metal roof. Some tree damage occurred, but the damage was minimal. Significant tree damage and snapped power poles occurred along Bison Rd. This tornado destroyed a 100-year old church, damaged a home's roof, and ripped apart many trees along its path. It also knocked over oil storage equipment. A large, southward moving tornado occurred along this path. A wide-area of trees were severely damaged and oil storage tanks were damaged towards the beginning of the path. The very large tornado moved over open terrain before dissipating. <b>Monetary damages for these tornados: Bison: \$15,000, Douglas: \$20,000, Hayward: \$00.00 = Total \$35,000 estimated.</b>
Mar 29, 2007	Hillsdale	<b>EF0</b> - Showers and thunderstorms developed during the morning hours over central Oklahoma. During the afternoon hours, thunderstorms began to show brief, but persistent signs of rotation, that later resulted in three tornadoes. The most significant tornado of the day struck the western Oklahoma City metro area, producing EF2 damage. Other tornadoes were reported near Okeene, and over northwest Garfield county. Damage was reported with each of these thunderstorms, which included roof damage, tree and power line damage, and automobile accidents. The tornado initially touched down 3 miles west of Hillsdale causing damage. Several trees had been snapped and large limbs were broken. A wooden shed had parts of its roof and part of an overhang removed. The pieces of the overhang and roof were lying on

Table 3-18

**GARFIELD COUNTY TORNADO EVENTS****2000 - April 2015****Sources: National Climatic Data Center  
National Weather Service – Norman**

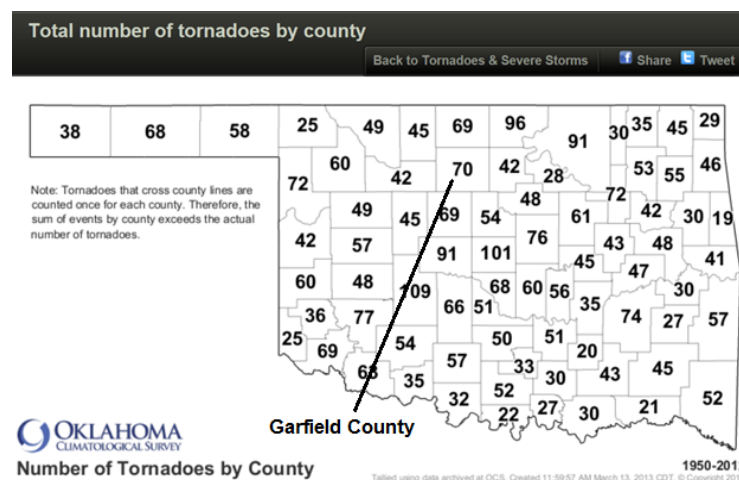
DATE	LOCATION	DESCRIPTION
		the south 200 ft. and to the east about 250 ft. Several sections of a metal gate (the sections were not attached to any fence) were blown approximately 25 feet. A small hay shed was also destroyed during the storm. One mile north of this location, a metal gate had been blown over. The tornado moved north, crossing into Grant county before lifting 4 miles SSE of Nash. <b>The tornado in Garfield County caused an estimated \$15 thousand in damages.</b>
May 25, 2000	Waukomis	<b>F0</b> - Severe thunderstorms first developed across portions of western and northern Oklahoma during the evening of the 25th, resulting in 4 confirmed tornados. This tornado, rated F0, formed about 1 mile north-northwest of Waukomis in Garfield County and was embedded in a large line of strong to severe thunderstorms which moved through much of Garfield County. The tornado produced 2 narrow areas of damage to wheat crop near the railroad track about 1/2 mile west of Highway 81 before dissipating. <b>No monetary damage estimate available.</b>
May 3, 1999	Covington; SE Garfield County	<b>F2</b> - A record outbreak of tornadoes struck Oklahoma from late afternoon of May 3, 1999, through early morning of May 4, 1999. To date, 58 tornadoes have been recorded across portions of western and central Oklahoma. ....The 4th and final tornado, H4, formed 3 miles southwest of Marshall in Logan County and tracked over mostly rural land, affecting 2 residences before dissipating in southeast Garfield County. An old, abandoned house near Marshall in northwest Logan County was completely destroyed (F2). Damage at another residence in southeast Garfield County included 3 destroyed grain bins, 1 which was tossed about a 1/2 mile. A pole barn was also destroyed with the remnants strewn about a 150-yard wide area, and an addition to a house was ripped off. Massive trees some with trunk diameters the size of a small car were also ripped completely out of the ground and tossed up to 200 yards. This tree damage occurred over an area covering several miles and overlapped the Logan/Garfield County border. <b>Estimated Garfield County damage = \$25,000.</b>
Apr 21, 1999	Carrier; Vance AFB	<b>F0 and F2</b> - Severe thunderstorms affected parts of western and central Oklahoma from late afternoon of the 21st through the early morning of the 22nd. An F2 tornado that struck the town of Carrier in Garfield County received the most attention, however 2 other tornados did form, and there were many reports of damaging straight-line winds and large, destructive hail. A team of National Weather Service meteorologists surveyed the damage in and near Carrier and rated the tornado an F2. The tornado developed at 1745 approximately 4 miles west-southwest of Carrier. The tornado moved along a path from west-southwest to east-northeast from its starting point to Carrier. The path width was approximately 150 yards wide early in the tornado's life. At a point 2 miles southwest of Carrier F2, damage was observed. A home had its roof ripped off and two walls collapsed. As the tornado began to approach Carrier it widened to approximately 500 yards. Four homes in Carrier lost all of their roofs with all four walls standing. One older abandoned cinder block building collapsed. A school and church on the north side of Carrier suffered minor roof or window damage. As the



<b>Table 3-18 GARFIELD COUNTY TORNADO EVENTS</b> <b>2000 - April 2015</b> <b>Sources: National Climatic Data Center</b> <b>National Weather Service – Norman</b>		
DATE	LOCATION	DESCRIPTION
		<p>storm moved out of Carrier, it turned to the northeast and narrowed to 200 yards. About 2 miles northeast of Carrier one home had significant damage to its roof while another suffered minor roof damage. The tornado was rated F1 at this point. The tornado dissipated at 1805 CST about 4 miles northeast of Carrier. The combination of the tornado and straight-line winds in believed to have been responsible for the majority of damage. After the tornado dissipated, straight-line winds continued to cause some damage for several miles. Significant tree damage was noted 4 miles east northeast of Carrier which was one and a half miles south of the tornado damage path. In total 8 homes and businesses were destroyed; 14 buildings sustained major damage, while 19 others sustained minor damage. Another tornado, an F0, was reported by Garfield County Emergency Management causing minor damage to roofs of 2 homes west-northwest of Vance Air Force Base. In addition, damaging straight-line winds were observed by the Chief of the Kremlin Fire Department in Garfield County who experienced a brief period of 70 to 80 mph winds from the northwest near the intersection of Highway 81 and Great Lakes Road 8 miles south of Kremlin. He also witnessed an old barn being blown over. Power lines were also downed on the north side of Enid. <b>Damage is estimated at 1.5 million dollars.</b></p>

## Probability of Future Events

Based on the location of Oklahoma between the warm humid air from the Gulf of Mexico, the arid hot air from New Mexico and the cool air from the Rocky Mountains, conditions are right, as proven by the history of tornados in Oklahoma and in Garfield County. On the map following prepared by the Oklahoma Climatological Survey (latest map available), Garfield County has experienced 70 tornado's since 1950 (does not include data before 1950 or after 2012.)



Fortunately, better construction practices can limit the damage potential from all but the most violent tornados. The residences and businesses of today are more likely to withstand the damaging winds of the majority of tornados than structures built fifty years ago. The recent interest in safe rooms in both



homes and schools will help reduce the hazard to both life and property.

The National Weather Service, Storm Prediction Center and National Weather Center in Norman are all continuing research to improve warning time and knowledge on how tornados are created. The NWS next step in NOAA's long-time weather radars is phased array radar. Available over the next few years, these radars using electronic controls of beams and frequencies can scan more quickly, thereby increasing lead times for tornado warnings. The system is expensive and may experience delays due to funding.

Public input and review by the Garfield County Hazard Mitigation Planning Team determined that, although Garfield County is not prone to as many tornado events as some other areas of the state, the potential for future tornados in Garfield County, participating jurisdictions, public schools and Autry Technology Center is **Likely**.

## **Vulnerability and Impact**

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Sixty-nine percent of all tornados are considered weak; over 82% of all tornado deaths are due to violent tornados (EF4-EF5), even though only 2% of tornados fall into that category. Tornado deaths by county are dominated by singular events, and largely a result of significant (EF2-EF4) tornados. The greatest vulnerability to be faced would be in the event an EF-3 or larger tornado directly hitting the City of Enid. Because Enid is the largest city in the county as well as the county seat, a large part of the economic base for Garfield County is in Enid, substantial damage would occur to the overall economy of Garfield County. The damage to infrastructure would be enormous with lost power, water, sewer, gas, and communications. Many key businesses including financial institutions, various merchandisers and suppliers the residents of the rest of the county depend on would be destroyed or damaged and possibly closed for an undermined period.

U.S. Highways 60; 64/412; and 81 are major arteries for western and northwestern Oklahoma. State highways also traverse the state adding commercial access. The hub in Garfield County is Enid and this would be affected by a major tornado. Many of those commercial arteries could be blocked possibly for weeks. Interstate 35 runs north and south thirty miles east of Enid adding to the accessibility of Garfield County. A tornado affecting any part of this interstate or the major arteries leading to and from it could interfere with the flow of commerce throughout Oklahoma and the United States.

Locally it could create major problems for public school bus routes, even if school buildings were undamaged. Detours through alternate transportation routes would have to be found likely putting strain on county roads that were not built for heavier highway traffic. Schools, hospitals, grocery stores and other critical and economically important facilities could be damaged and/or closed for extended periods. Many businesses that were damaged or destroyed would remain closed until repairs or replacement could occur. Employment would be affected because of businesses closing and laying off employees due to the loss of business. Some businesses never re-open after a tornado either due to lack of resources to start over or loss of desire to rebuild. Some residents leave and never return, leaving their property in the post tornado condition, causing major health concerns and a need for local government to clean it up.

Many roads and bridges could be damaged or at the least blocked by debris and inaccessible for local traffic. This could greatly affect the heavy traffic throughout Garfield County. Alternate routes would have to be found which could further cause traffic problems due to roads not developed for that amount of traffic or excessively long alternate routes. Continuity of government could be severely limited. Emergency response could also be greatly hindered by having to find and use alternate routes. People would lose their homes and be displaced from their primary residence with high numbers of injuries and fatalities possible. Mobile homes and frame structures are the most vulnerable even with preventative actions such as tied downs for mobile homes. Power and water outages occur with most tornados whether in urban or rural areas often causing food spoilage and sanitation problems for residents.

Some residents in Garfield County have built safe rooms or underground tornado shelters. Many others throughout the rest of the county are interested in protecting their family. Schools and the Technology Center also have indicated a need for shelter from major tornados in order to protect their students and staff by building saferooms.

At present, schools have designated areas of refuge within the schools for severe storms and tornados but, none of the participating schools have tornado shelters or safe rooms built to the FEMA p-361 recommendations or ICC 500 standards.

## **Conclusions**

Tornados are a part of life in Oklahoma, and residents, both rural and urban, must be aware of actions they can take to protect their family from tornados.

There are new people moving to Garfield County that need to get information on how to protect them from any tornado they may experience. Mitigation planning can reduce the effects these storms have on the residents of Garfield County, all of the jurisdictions both incorporated and unincorporated, its school districts and the Autry Technology Center.

## References

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(NCDC) National Climatic Data Center (<http://www.ncdc.noaa.gov/stormevents/>)

(NWS) National Weather Service – Norman <http://www.srh.noaa.gov/oun/>

(OCS)Oklahoma Climatological Survey (<http://climate.mesonet.org/>)

## HAZARD PROFILE

**Wildfire – Garfield County; Breckinridge; Carrier; Covington; Douglas; Drummond; Enid; Fairmont; Garber; Hillsdale; Hunter; Kremlin; Lahoma; North Enid; Waukomis**

A wildfire is often a raging inferno that rapidly spreads out of control. It happens most frequently in the summer and fall, when the brush is dry and flames can move unchecked through wooded or heavily grassed areas. The fire often begins unnoticed and spreads quickly, lighting brush, trees and homes. It may be started by a campfire that was not doused properly, a tossed cigarette, burning debris, lightning or arson.

Wildfire is a natural part of Oklahoma's ecosystem. Before the area around Garfield County was settled, wildfires, usually started by lightning, ran across the plains, or through the forests replenishing nutrients to the soils and controlling invasive plant species. With settlement, however, the interaction of wildfire and the environment has changed. Now, people and structures are at-risk from flames spreading across the grasslands, full fields of crops and wooded areas in Garfield County. Today, communities lie alongside wild lands, creating an urban-wild land interface that is at risk of uncontrolled burns.



The development of urban-wildland interfaces is part of a growing national problem. Fire losses and suppression costs have skyrocketed over the past decade. As homes and businesses have edged into valleys, woodlands, prairies and canyons, often far away from available water sources to extinguish flames, costs of fire control have increased for local fire departments. Many of the fire departments in Garfield County are volunteer departments and equipment is expensive to keep operational.



**Weather** plays a major role in the birth, growth and death of a wildfire. Drought leads to extremely favorable conditions for wildfires, as do humidity, temperature, and wind. The combination of wind, temperature, and humidity affects how fast wildland fires can spread.

These combinations will change throughout the day and night, and the presence of fire will impact each factor, causing even greater variation.

A common type of wildfire in Garfield County is a crop fire. Topography, time of day, time of year, Relative Humidity, wind speed and direction, fuel moisture, fuel load, approaching weather systems, and available resources are just some of the factors that play into the progression of a crop fire. The loss of a farmer's crop can be devastating to their livelihood and an economical loss to the town and county economies.

## Location

All of Garfield County including the unincorporated communities and the participating incorporated communities of Breckinridge; Carrier; Covington; Douglas; Drummond; Enid; Fairmont; Garber; Hillsdale; Hunter; Kremlin; Lahoma; North Enid; and Waukomis are susceptible to the threat of grass/wildfire or crop fires. The public schools and Autry Technology Center are not at threat of wildland or crop fires.

Much of rural Garfield County is cultivated in wheat, corn, sorghum or other agricultural crop. The threat of a crop fire is more prevalent than a wildland fire due to the volume of crops grown.

All of the school campuses located within the planning area have well maintained grounds and have no threat to school buildings from wild land fire (wildfire). Some of the campuses are located close to wild land areas but buildings are isolated by roads, drives, parking lots, ball fields, etc.

Many areas within Garfield County and the participating jurisdictions have areas with high concentrations of the invasive Eastern Red Cedar trees. Red Cedar seeps cedar oil that when heated to its flash point explodes sending hot embers airborne and spreading wildfire often faster than firefighters can keep up.

**GARFIELD COUNTY** – Garfield County has a few areas primarily along streams and creeks or abandoned/empty fields that are potential wildfire risks however, the biggest threat is that of crop fires. The towns shown on the map are individually examined regarding their threat.



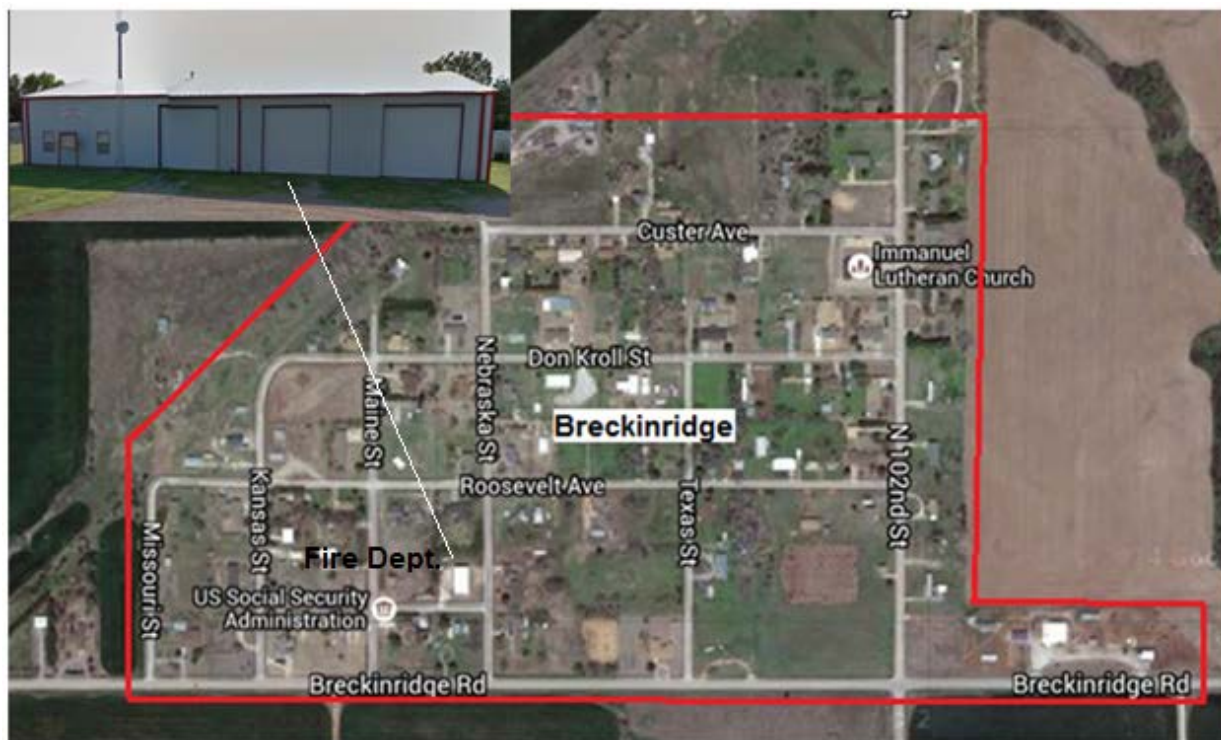


For the purpose of this plan, the Wildland Urban Interface will be identified for each community profiled in this section as follows:

### **WILDLAND URBAN INTERFACE:**

*The term wildland-urban interface (WUI) has been used for more than two decades to suggest an area where structures (usually homes) are in or near wildlands (forests or rangelands). There is no standard WUI definition. However, the definition listed in a 2001 Federal Register notice is commonly referenced the urban-wildland interface community exists where humans and their development meet or intermix with wildland fuel.*

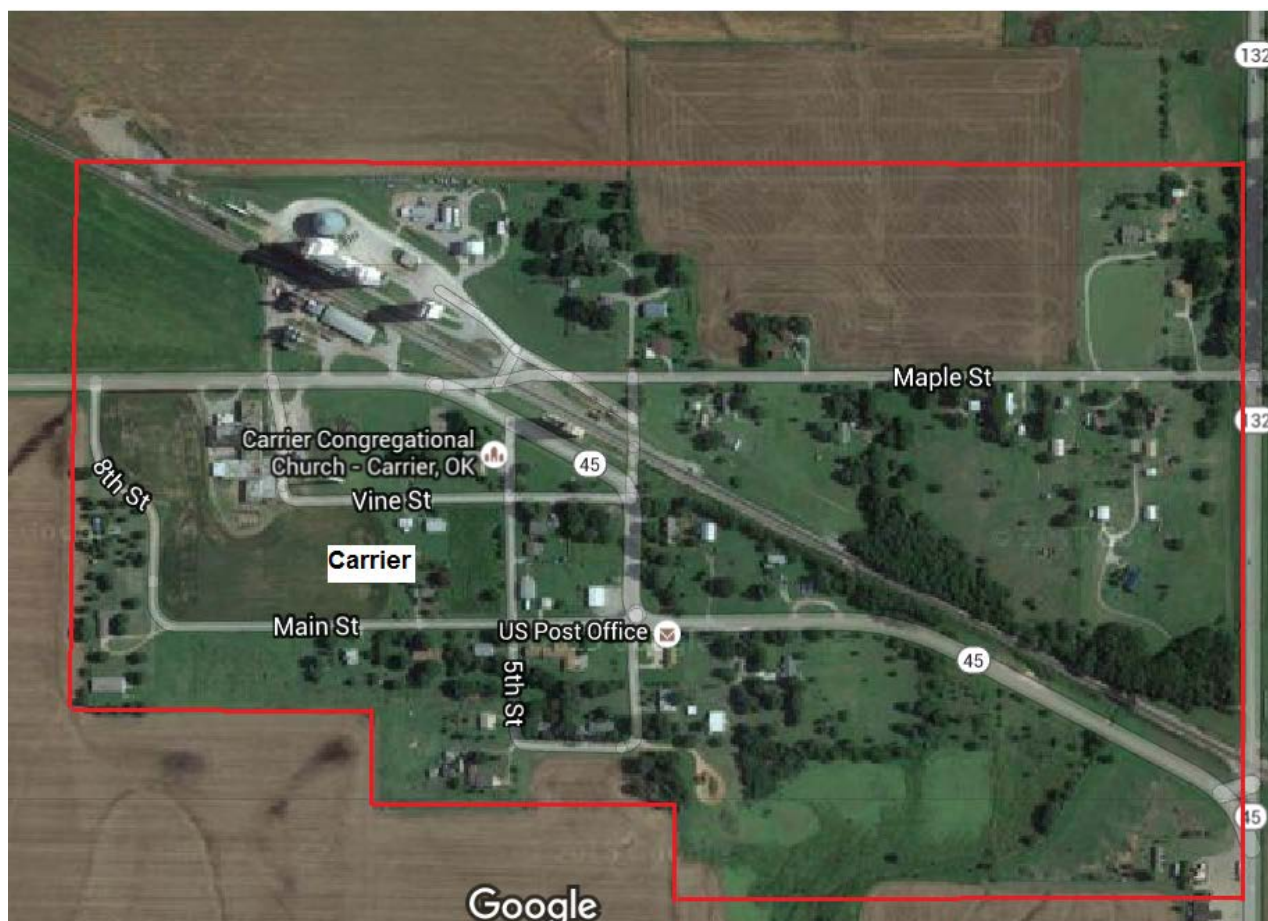
**TOWN OF BRECKINRIDGE** – The Town of Breckinridge is a small rural farming community 15.2 square miles in size much of which is undeveloped. The population in 2010 was 245 residents in comparison to 239 in 2000. Breckinridge has a volunteer fire department to provide fire service when needed. Fortunately, there is not a major wildfire threat in the community although crop fires could be a threat outside the WUI. There are no schools in Breckinridge. The wildfire threat to Breckinridge is **POSSIBLE**.





The biggest wildfire threat to Breckinridge is the croplands surrounding the community. Within the WUI, there is little fuel except grass that perhaps gets too long and catches fire through carelessness. The trees and cedars in town are generally sparse or in small wooded areas but do not present a wildfire problem. Losses from cropland fires would result in economic losses and a slight potential for structural loss.

**TOWN OF CARRIER** – The Town of Carrier is a small rural agricultural community 1.2 miles in size. The population in 2010 was 85 residents which restricts its resources. Communities around Carrier provide fire service when needed. Fortunately, there is not a major wildfire threat



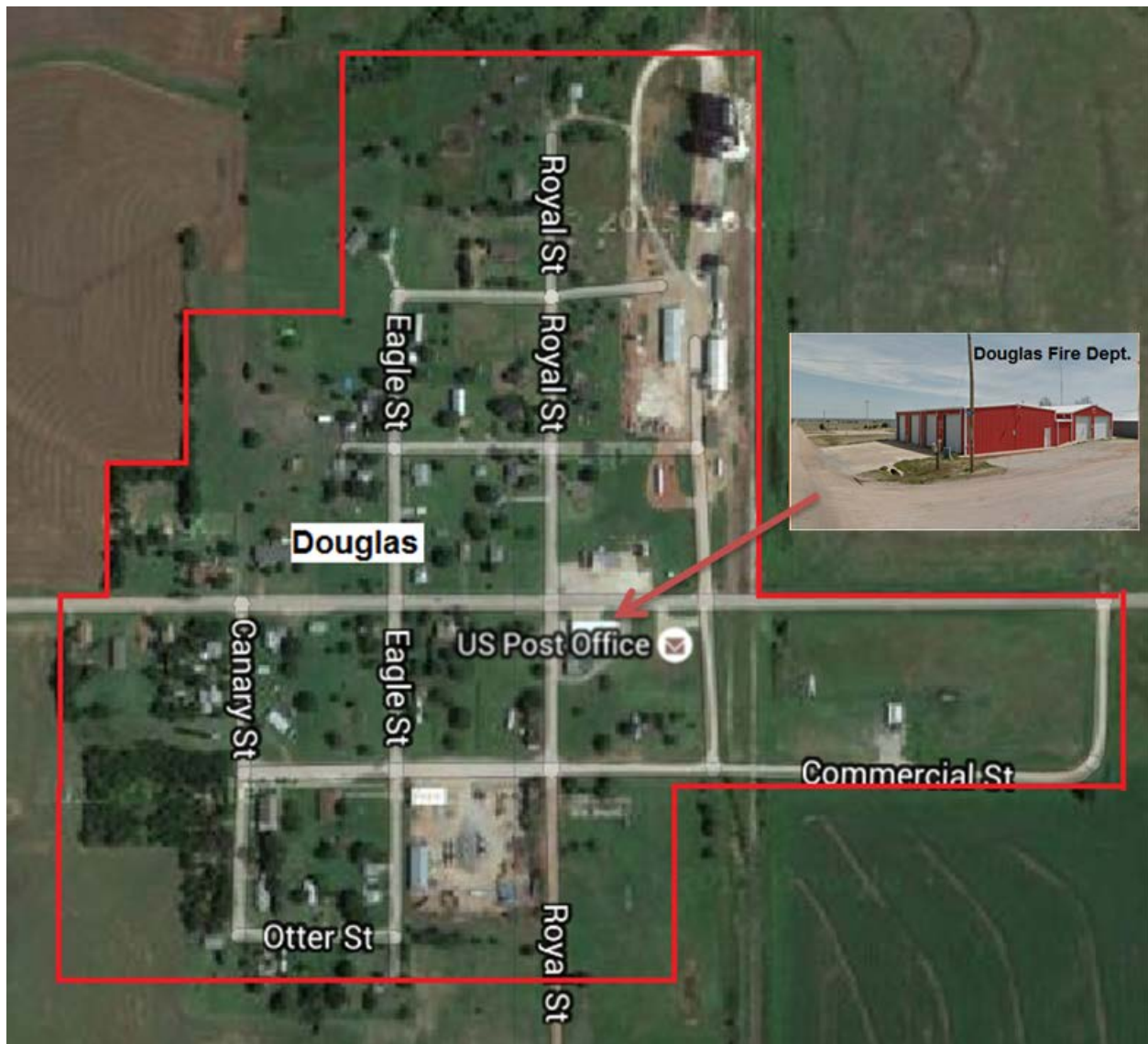


in the community although crop fires could be a threat outside the WUI. There are no schools in Carrier. The threat to Carrier is “**POSSIBLE**”.

**TOWN OF COVINGTON** – Covington is a rural community in SE Garfield County with an area of 0.4 square miles. Covington-Douglas Public Schools is located in the SE corner of the community. The community has an active volunteer fire department but has little risk of wildfire. Crop fires are possible as there is a lot of agriculture around Covington. Crop fires can be more destructive to the economy than a wildfire due to the value involved. Most communities in Garfield County are involved largely in agriculture. The threat of wildfire/crop fire in Covington is “**POSSIBLE**”.



**TOWN OF DOUGLAS** – The Town of Douglas is a very small rural Garfield County incorporated community with only 0.2 square miles of area. Located in SE Garfield County the population in 2010 census was 32. Crop fires are the largest threat near Douglas. There are no schools located in Douglas. The wildfire/crop fire threat to Douglas is “**POSSIBLE**”.



**TOWN OF DRUMMOND** – Drummond is a small rural agricultural community (0.2 square miles) in western Garfield County. With a population in 2010 of 455 citizens, most are dependent on agriculture or commute to Enid other jobs some of those related to agriculture. The school in Drummond is located in the SE corner of the community directly across from the fire department. The chance of a wildfire affecting this school or the community is possible but more due to a crop fire than a large woodland fire due to the lack of woods in the area. The wildfire/crop fire threat to Drummond is **“POSSIBLE”**.



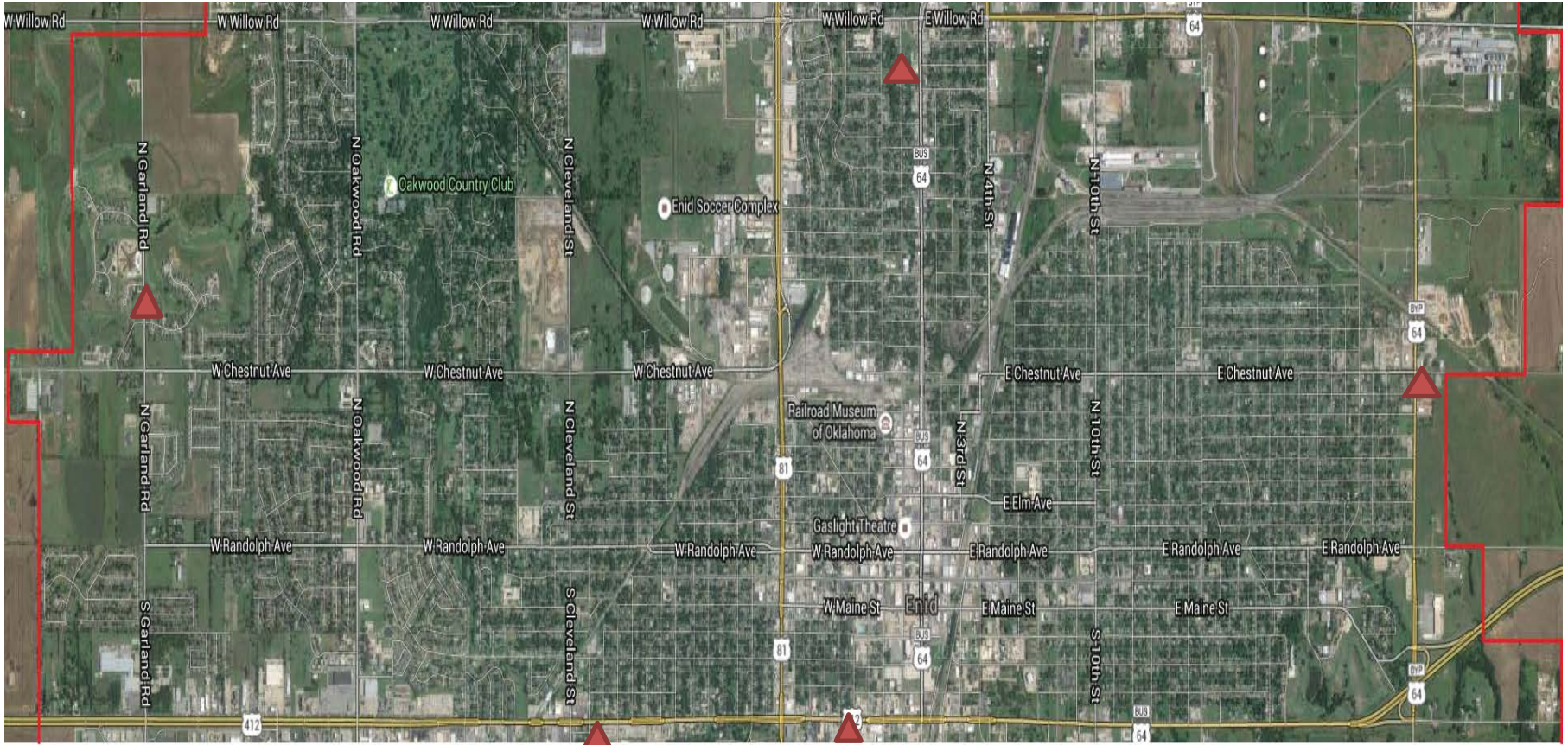


**CITY OF ENID** – The City of Enid is the largest community in Garfield County and is the county seat. With a population of 49,379 (ninth largest in Oklahoma) in 2010, the community heavily influences the economy in the county. Enid is the hub of the county and many of the smaller communities rely on produce and merchandise from Enid. The Enid Fire Department is well equipped and well manned with trained full time fire fighters. The stations are spread around the city to provide the best protection possible although more fire stations and equipment are always in review. Enid provides mutual aid to the smaller communities when asked for



assistance by the host department. Enid has some areas near the outskirts of the WUI area but is quick to respond and as a result seldom has a major woodland, grass or crop fire result. The wildfire/crop fire threat to Enid is “**LIKELY**”.

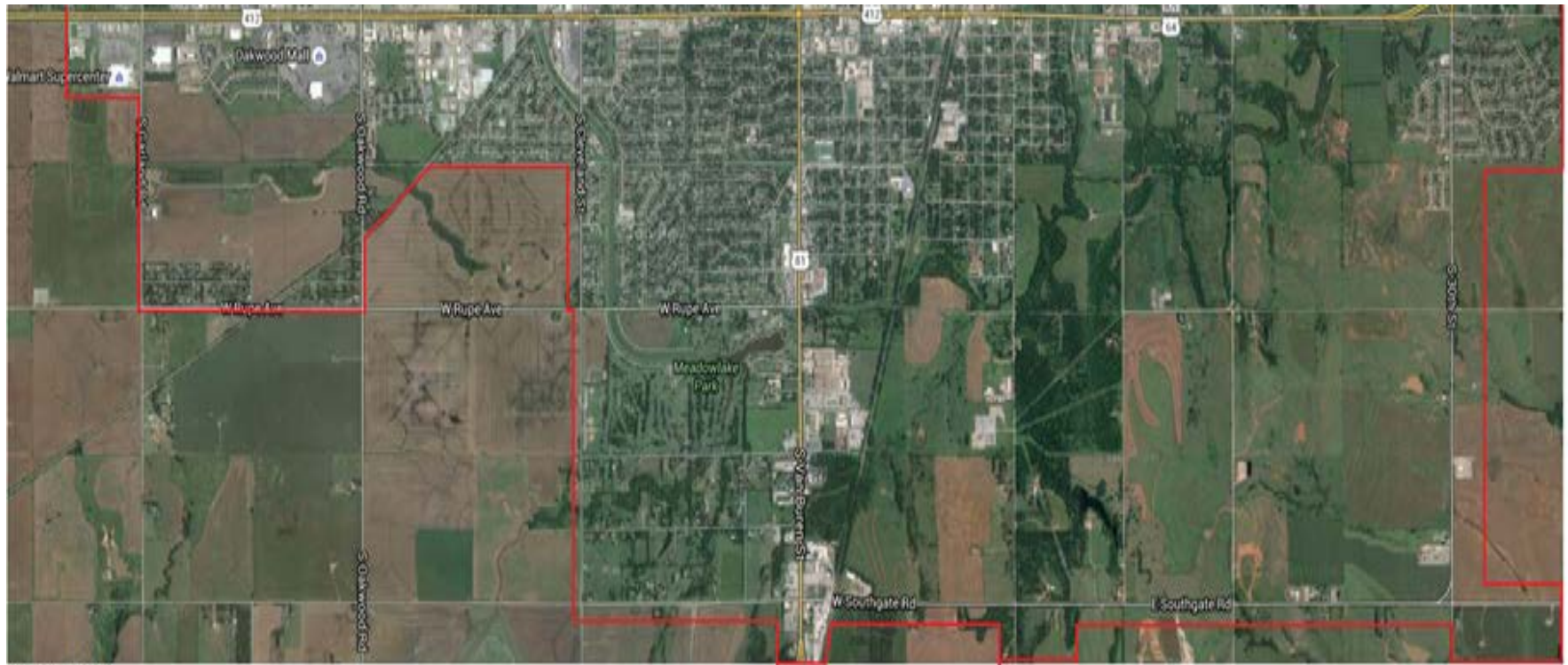




Central Enid

▲ Enid Fire Department Stations







### **ENID FIRE DEPARTMENT**

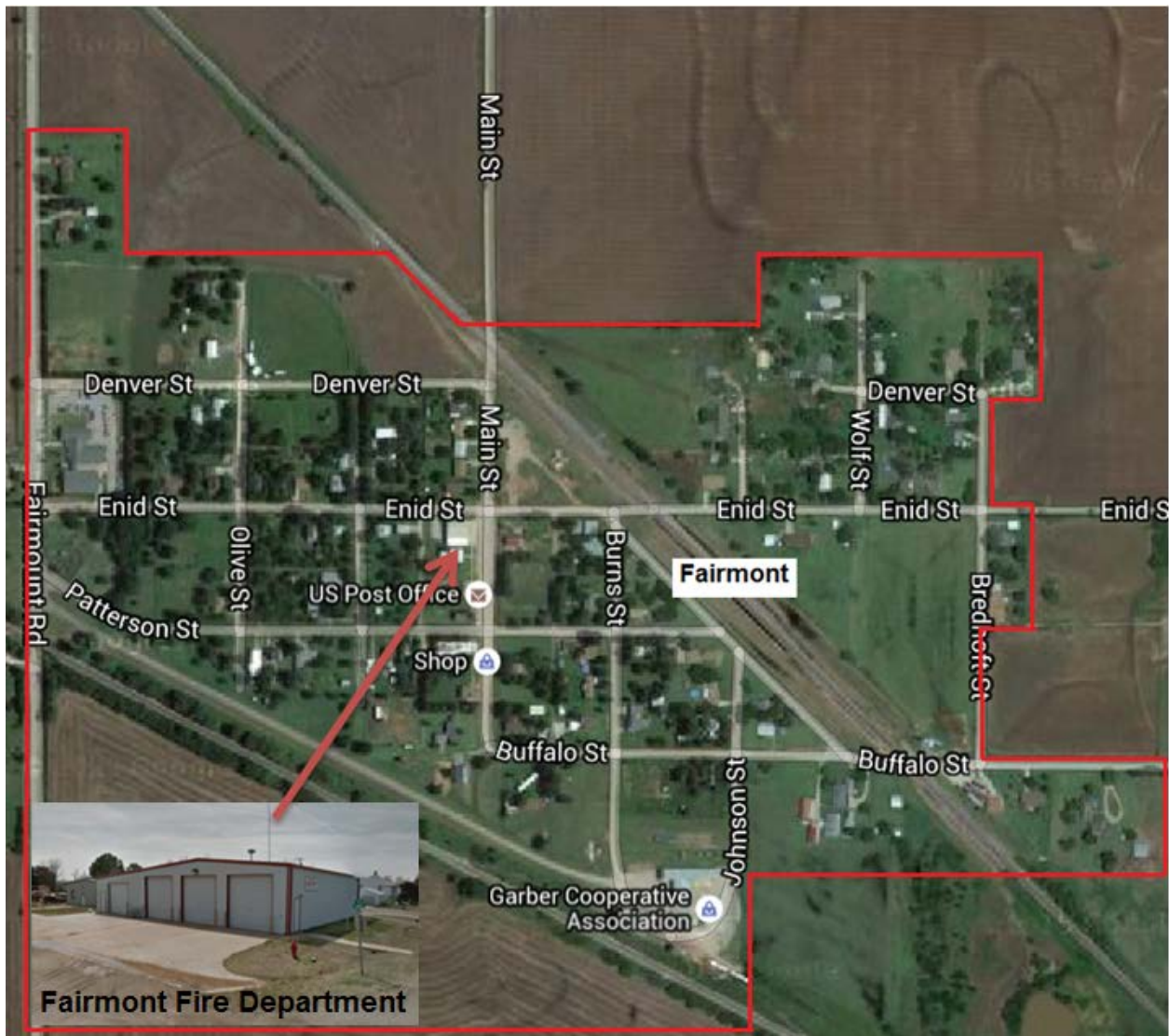
**TOWN OF FAIRMONT** – The Town of Fairmont is a small rural farming community in Garfield County of 134 citizens. The land area of the town is 0.3 square miles.

The biggest threat Fairmont is crop fires rather than wildland fires. Crop fires can develop into a serious matter however for residents of the community. The town is surrounded by cultivated land used for crops such as wheat and corn. Fairmont has an active Volunteer Fire Department.

There are areas inside the WUI area however, that could result in a major fire with loss of property. The areas shown below are along Olive Street that is especially vulnerable to a major fire. There are no schools in Fairmont. The wildfire/crop fire threat to Fairmont is “**POSSIBLE**”.





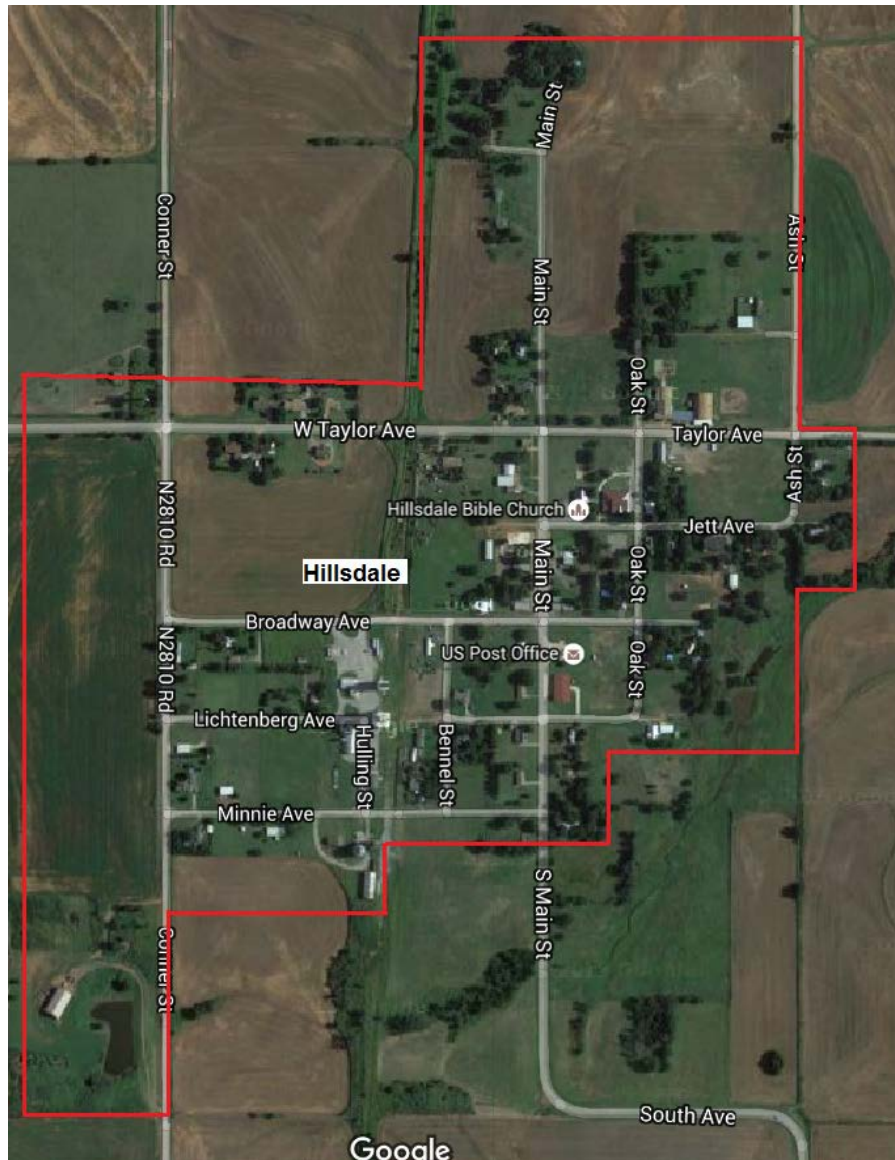


**TOWN OF GARBER** – The Town of Garber is a rural farming community in Garfield County of 0.5 square miles and a population in 2010 of 822. Garber Schools are not at threat of wildfire or crop fires. The wildfire threat to residents in Garber is primarily crop fires outside the red border marking the Wildland Urban Interface. Trees in the community are generally not in groves and grass is generally kept mowed. Grass and crop fires in Garber are **“POSSIBLE”**.



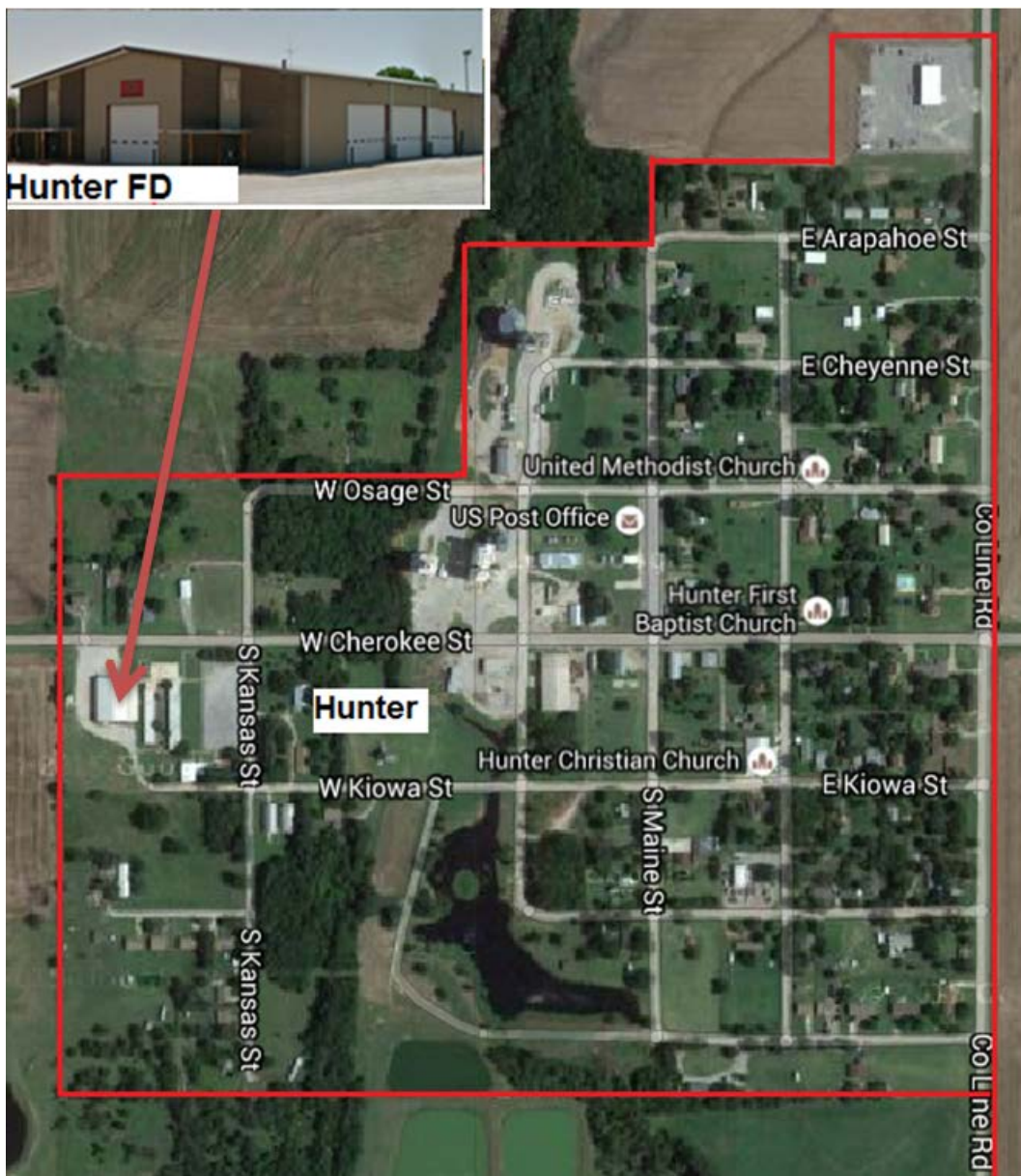


**TOWN OF HILLSDALE** – Hillsdale is a small rural community of 121 citizens in the 2010 census. The community has a land area of 0.4 square miles. The major threat to the community is the area outside the red border which is primarily cultivated lands. Crop fires are possible. There are no schools in Hillsdale. The wildfire/crop fire threat to Hillsdale is “**POSSIBLE**”.



**TOWN OF HUNTER** – The Town of Hunter is a very small farming community in Garfield County with a population of 165 citizens on 0.2 square miles. While the town has a threat of crop fires outside the town limits, there are areas in town that could experience a wildfire. The following is one such area next to the towns COOP Grain elevator.







There are no public schools located in Hunter. Another area that could be a concern of a wildfire breaking out is this area on Pottawatomie Road near the intersection of Main Street. The structures next to it are unprotected. The wildfire/crop fire threat to Hunter is **“POSSIBLE”**.

#### **TOWN OF KREMLIN –**

The Town of Kremlin is a small rural community located in north central Garfield County with a population in 2010 of 255 citizens. The land area is 0.3 square miles. The primary threat to the town of Kremlin is the threat of crop fires in that the area around the town is generally cultivated land and grows various crops.

The threat of wildfire or crop fire to the Kremlin is **“POSSIBLE.”**





**TOWN OF LAHOMA** – Lahoma is a small rural agricultural community in far west central Garfield County. The community is 0.3 square miles with a population of 611 according to the 2010 census.

The area around Lahoma is primarily agricultural produce with very little grassland or wooded area. The threat to Lahoma for wildfire/crop fires is **POSSIBLE**.

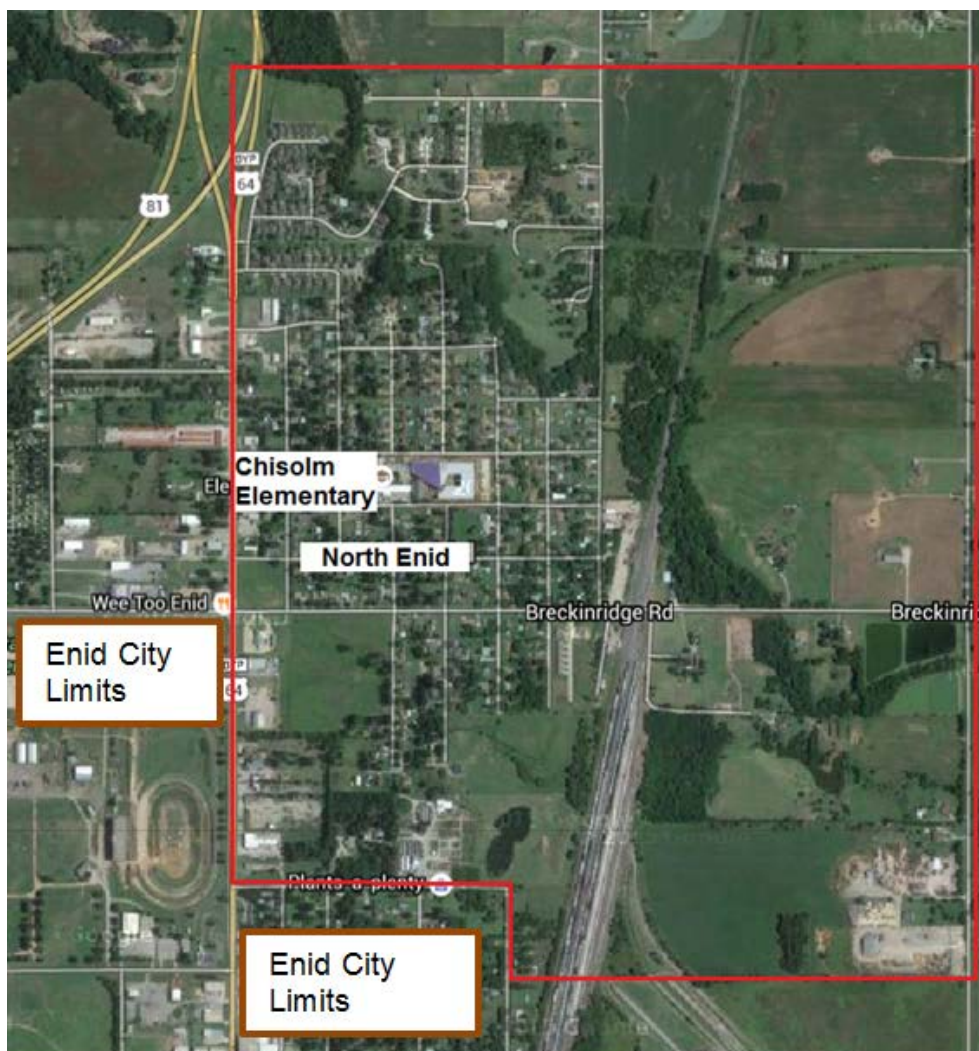




**TOWN OF NORTH ENID** – The Town of North Enid is located just on the northern border of Enid.

The area is 2.3 square miles with a 2010 census population of 866. The town depends on the Enid Fire Department for fire protection. A few areas near populated areas in North Enid could experience a wildland fire. One of those areas is shown below. The wildfire/crop fire threat to

North Enid is  
**“POSSIBLE”**.



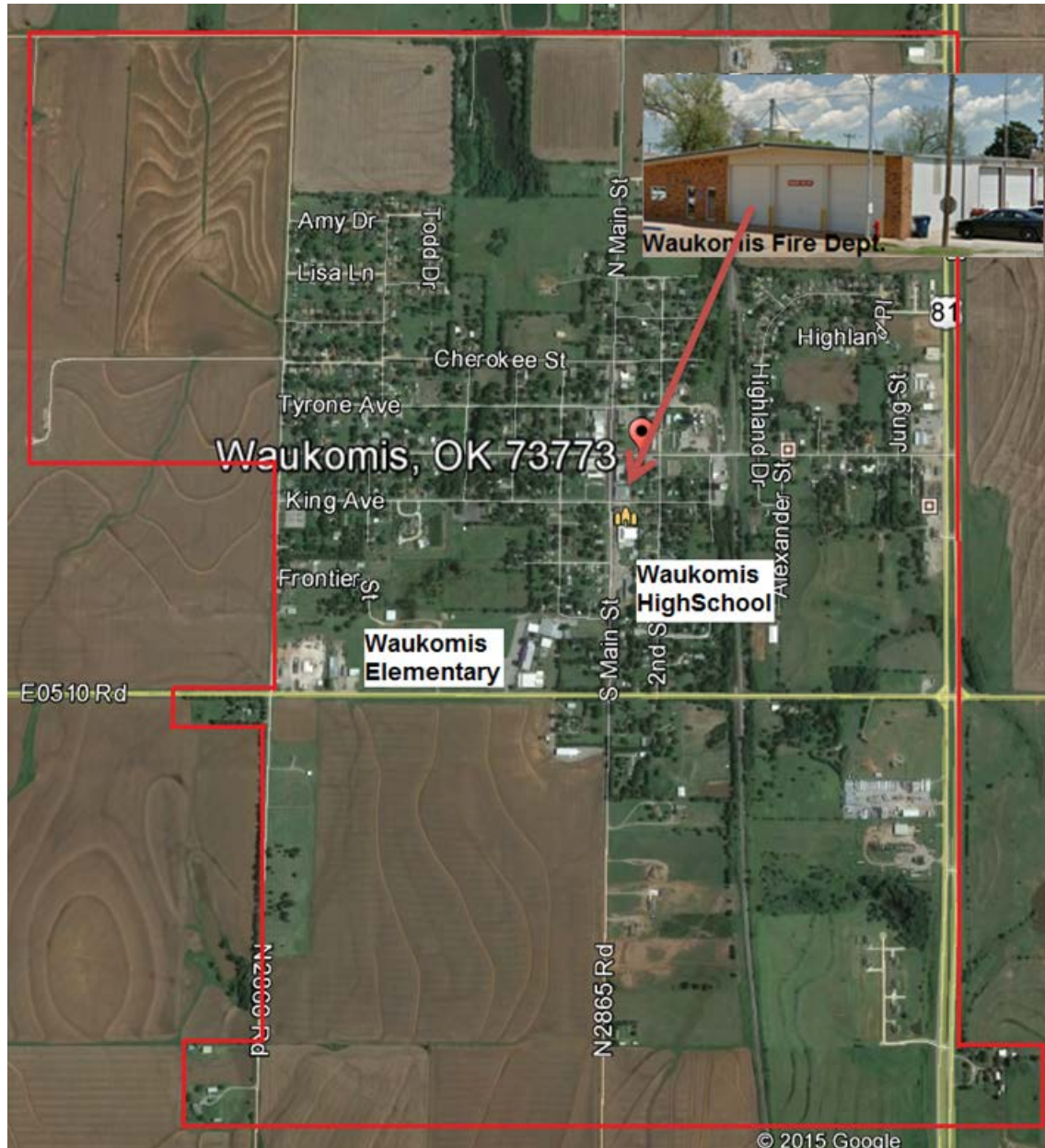
Chisholm Elementary is shown on the map above of North Enid and the threat of wildfire or crop fires is unlikely due to its location. The middle school and high school are located 3 miles NW of town and are shown next.



School busses could be affected by a fire in the area around the school and have to change their normal route but there is very little threat to the buildings.



**TOWN OF WAUKOMIS** – The town of Waukomis is located south of Enid on highway 81, a major north south route. The town is 3.1 square miles with a population in 2010 of 1,286 residents. The town is close to Vance AFB so a lot of military live in the town. Agriculture is also a major industry for the community.



The schools in Waukomis are inside the WUI. The High School threat of wildfire or crop fire is unlikely. The elementary school is possible since there is a crop field directly south of the school. The primary threat however would be the threat of smoke crossing the road and affecting students or staff suffering from asthma or other respiratory problems.

The Fire Department in Waukomis is well equipped to handle any wildland or crop fire that might become a threat to the town. The wildfire/crop fire threat to Waukomis is “**POSSIBLE**”.

## Extent

Garfield County experiences a variety of wildfire conditions found in the Keetch-Byram Drought Index. Spring usually centers on the 0-200 rating while July through December are usually drier and depending on fuel and moisture usually will rate in the 400-600 range. During extreme dry and/or drought times such as during 2011, Garfield County would likely be rated at 600-800.

Garfield County is primarily threatened by crop fires. Wildfires are also experienced as are grassfires. There are three different classes of wildland fires. A surface fire is the most common type in Oklahoma and in Garfield County.

**Surface fire** is the most common type of wildfire in Garfield County and its participating jurisdictions. Surface fires usually move rapidly through an area, and do not consume the entire organic layer. Moisture in the organic horizons often prevents ignition of the humus layer, and protects the soil and soil-inhabiting organisms from the heat. Anything above 400 on the KBDI index is considered extreme and cause for high fire danger warnings.

**Ground fires** normally smolder or creep slowly through the litter and humus layers, consuming all or most of the organic cover, and exposing mineral soil or underlying rock. These fires usually only occur during periods of protracted drought when the entire soil organic layer may dry sufficiently

**Crown fires** occur when surface or ground fires ignite brush piles and dead or living lower branches of standing trees, tree crowns become engulfed in flames, and the fire spreads to nearby trees. Crown fires occur in forests during periods of drought and low relative humidity, particularly in areas with heavy accumulations small trees and bushes below the level of the taller trees in the forest. Crown fires generate tremendous heat that rises in a strong convection column, drawing in brisk surface winds that fan the flames even more. Heated air blowing across the flames also warms and dries the fuels ahead of the fire, and releases volatile gases from vegetation ahead of the flaming front.



**Keetch-Byram Drought Index, fire danger rating system:** The Keetch-Byram Drought Index (KBDI) is basically a mathematical system for relating current and recent weather conditions to potential or expected fire behavior. This system was originally developed for the southeastern United States and is based primarily on recent rainfall patterns.

The KBDI is the most widely used drought index system by fire managers in the south. It is also one of the only drought index systems specifically developed to equate the effects of drought with potential fire activities. The result of this system is a drought index number ranging from 0 to 800 that accurately describes the amount of moisture that is missing. A rating of zero defines the point where there is no moisture deficiency and 800 is the maximum drought possible. The inputs for KBDI are weather station latitude, mean annual precipitation, maximum dry bulb temperature, and the last 24 hours of rainfall. KBDI levels and its relationship to expected fire potential are reflected in the following table:

**Table 3-19**

<b>The Keetch-Byram Drought Index (KBDI) <i>fire danger rating system</i></b>	
<b>0 - 200</b>	Soil and fuel moisture are high. Most fuels will not readily ignite or burn. However, with sufficient sunlight and wind, cured grasses and some light surface fuels will burn in spots and patches.
<b>200 - 400</b>	Fires more readily burn and will carry across an area with no gaps. Heavier fuels will still not readily ignite and burn. Also, expect smoldering and the resulting smoke to carry into and possibly through the night.
<b>400 - 600</b>	Fire intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems.
<b>600 - 800</b>	Fires will burn to mineral soil. Stumps will burn to the end of underground roots and spotting will be a major problem. Fires will burn thorough the night and heavier fuels will actively burn and contribute to fire intensity

The range of the index is determined by assuming that there is 8 inches of moisture in a saturated soil that is readily available to the vegetation. For different soil types, the depth of soil required to hold 8 inches of moisture varies (loam=30", clay=25" and sand=80"). A prolonged drought (high KBDI) influences fire intensity largely because more fuel is available for combustion (i.e. fuels have a lower moisture content). In addition, the drying of organic material in the soil can lead to increased difficulty in fire suppression. Garfield County and participating jurisdictions officials consider any wildland fire as a threat to lives and property however conditions indicating a 400 on the fire rating system would be a severe threat and appropriate warnings would be enacted through local media.



## Previous Occurrences

Garfield County experiences wildland fires at times. The worst wildfire season in recent history was during the 2005-2006 summer through the spring months. During those extremely dry periods, Garfield County was rated at 600-800 on the KBDI.



Wildfires and crop fires are usually signaled by dense smoke that fills the area for miles around. Wildfires often begin unnoticed and spread quickly, igniting brush, trees, and homes. Following is the history of Garfield County grass and wildfire fires, crop fires. Some of the more severe years for wildland fires with acres loss and damage costs coincide with drought years of 1998, 2005 and 2006, and 2011.

**2010 - No report available**  
**NRA – No report available**

**Table 3-20 GARFIELD COUNTY WILDFIRE, CROP, GRASSFIRE EVENTS**  
**2005-2012 (only data available)**

Fire Dept.	Number of Events						Approx. # Acres Lost					
	2005	2006	2007	2008	2009	2011	2005	2006	2007	2008	2009	2011
Breckinridge F.D.		11	NRA	NRA	20			10000	NRA	NRA	300	
Covington F.D.		NRA	NRA	NRA	22			NRA	NRA	NRA	627	
Douglas F.D.		3	4	8	8			NRA	100	280	160	
Drummond F.D.	10	12	12	16	18		0	NRA	NRA	762	300	
Enid Fire Dept.	104	100	36	77	33	13	181	238	25	243	43	202
Fairmont F.D.		5	7	18	21			25	25	200	NRA	
Garber F.D.		NRA	NRA	NRA	NRA			NRA	NRA	NRA	NRA	
Hillsdale F.D.	16	NRA	NRA	33	19		725	NRA	NRA	160	212	
Hunter F.D.	30	NRA	15	7	6		4500	NRA	500	NRA	150	
Kremlin F.D.	30	23	16	29	46		1200	500	90	90	505	
Lahoma F.D.	2	NRA	4	1	3		2	NRA	10	NRA	NRA	
Waukomis F.D.	28	15	6	26	20		492	116	51	186	475	
Pioneer-Skelton Creek F.D.	8	3	1	5	27		21	7	NRA	5	250	

## Probability of Future Events

Garfield County has a wildfire hazard due to the climate, the types of fuels present and the cultural practices used. Garfield County is south of the Snow Belt, leaving its grassy fuels

exposed and vulnerable to fire in the dormant season. It is far enough north of the Gulf of Mexico that it is influenced by the continental climate in the winter.

Summers are hot and usually dry, with daytime highs in the mid-90s and generally less than 4 inches of rain in July and August. Oklahoma recognizes 10 months as fire season. Wildland fuels are prone to burning from July through April. Only May and June are not considered “fire season”.

Most at risk of wildland/crop fires are those people who make their homes in rural areas. Garfield County has many farm homes and ranches located in cultivated areas with waist height



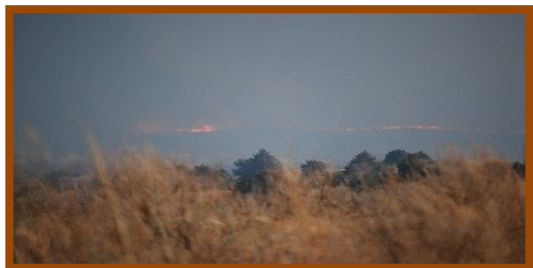
crops. There are some heavily wooded areas along streams and creeks but homes are generally not



built in those areas in Garfield County. Based on past experience and that Garfield County often experiences dry conditions during various times of the year, Garfield County and participating cities and towns are susceptible to wildfires. The GCHMPT determined the potential for wildland fires or crop fires is **LIKELY**.

## Vulnerability and Impact

Some critical facilities including many transportation routes, pipelines, electrical transmission lines, communications towers, and county district highway equipment yards are located in wooded and/or cropland environments. Loss of any of these facilities could result in a critical



drain on the resources, response and recovery capabilities of Garfield County and the participating incorporated communities. Residences and businesses located in the wooded, crop or high grass areas could be damaged or destroyed causing residents to be evacuated and possibly relocated.

Businesses damaged or lost due to wildfires would be forced to close until repairs could be made or the building rebuilt. This situation could result in loss of employees and loss of income for both employees and owners. Farmers losing their year's crop can be devastated financially.

The attitudes and productivity of members and officials of jurisdictions that provide fire and emergency services has a major influence on the level of wildfire risk. These vary widely throughout Garfield County and its participating jurisdictions. Examples are areas which do not maintain adequate care between flammable vegetation and buildings, or do not maintain a reliable water supply to deal with spot fires. Often grass and underbrush is allowed to grow uncontrolled which poses a fire threat to those structures. Those homes and businesses located in the vicinity of high grass or densely wooded areas could be damaged or destroyed by fire which would probably cause occupants to be evacuated or have to relocate. Building ignitions



during wildfires in the Garfield County and the participating jurisdictions occur when components of a home or building are exposed to one or more of three basic wildfire exposures. These exposures include: 1) burning embers, 2) direct flame contact, and 3) radiant heat. Burning embers are the most important cause of home ignitions. When they land on or near a building

they can ignite near-by vegetation or accumulated debris on the roof or in the gutter, or enter the building through openings (an open window or vent for example) and ignite furnishings in the building or debris in the attic. Near-building ignitions will subject some portion of the building to either a direct flame contact exposure, where the flames actually touch the building, or a radiant heat exposure, the heat you feel when standing near a campfire or fireplace. The vulnerability of a building to radiant heat depends on the intensity *and* duration of the exposure.

At times, smoke from wildfires may affect patients in healthcare facilities and nursing homes or who suffer from asthma; emphysema or other respiratory ailments and may be forced to evacuate if the smoke becomes extreme. Loss of transportation routes in Garfield County could severely affect mail delivery; school bus access, local, state and interstate commerce could be catastrophic to Garfield County's economy. Wildlife and livestock along with crops could suffer losses from fire throughout the county. Loss especially of large numbers of livestock and acres of crops could deal a major blow to Garfield County's economy as well as the property owner. Additional dry hydrants in ponds and reservoirs would add additional sources of water to fill firefighting vehicles alleviating the effects of wildfire on citizens and property.

## **Conclusion**

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Garfield County and the participating jurisdictions are susceptible to Wildfires, and have experienced a number of wildland/crop fires over the past decades including the loss of some structures. Due to the dedicated firefighters in Garfield County and surrounding counties, monetary losses have generally been kept low. Fortunately, Enid has the largest capability for firefighting and is willing to help their neighbors when needed. Public education can help tremendously to relieve wildfires in Garfield County.

## **References**

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Garfield County Emergency Management  
Oklahoma State Fire Marshalls office

## HAZARD PROFILE

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### Winter Storms

A winter storm can range from moderate snow over a few hours to blizzard conditions with high winds, freezing rain or sleet, and extremely cold temperatures that last several days.

**FLURRIES** are snow events with light snow falling for short durations. No accumulation or only a light dusting is all that is expected with little or no effect on the population of the state.

**SEVERE WINTER STORM** is one that drops 4 or more inches of snow during a 12-hour period, or 6 or more inches during a 24- hour span.

**WINTER STORM** This term refers to a combination of winter precipitation, including snow, sleet, freezing rain, etc.

**BLOWING SNOW** is wind-driven snow that reduces visibility and causes significant drifting. Blowing snow may be snow that is falling and/or loose snow on the ground and picked up by the wind.

**BLIZZARDS**, though infrequent in Oklahoma are due to winds over 35 mph with snow and blowing snow-reducing visibility to near zero.

**ICE STORMS** occur when freezing rain or sleet falls and freezes immediately on impact.

**FREEZING RAIN** is rain that falls onto a surface with a temperature below freezing. This causes it to freeze to surfaces, such as trees, cars, and roads, forming a coating or glaze of ice. Even small accumulations of ice can cause a significant hazard.

**SLEET** is rain drops that freeze into ice pellets before reaching the ground. Sleet usually bounces when hitting a surface and does not stick to objects. However, it can accumulate like snow and cause a hazard to motorists.



**WIND CHILL** is used to describe the relative discomfort and danger to people from the combination of cold temperatures and wind. The wind chill chart below from the National Weather Service shows the wind chill derived from both wind speed and temperature.

### Location

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All of Garfield County including the unincorporated communities, the incorporated communities, the school districts and Autry Technology Center are all susceptible to the potential of winter



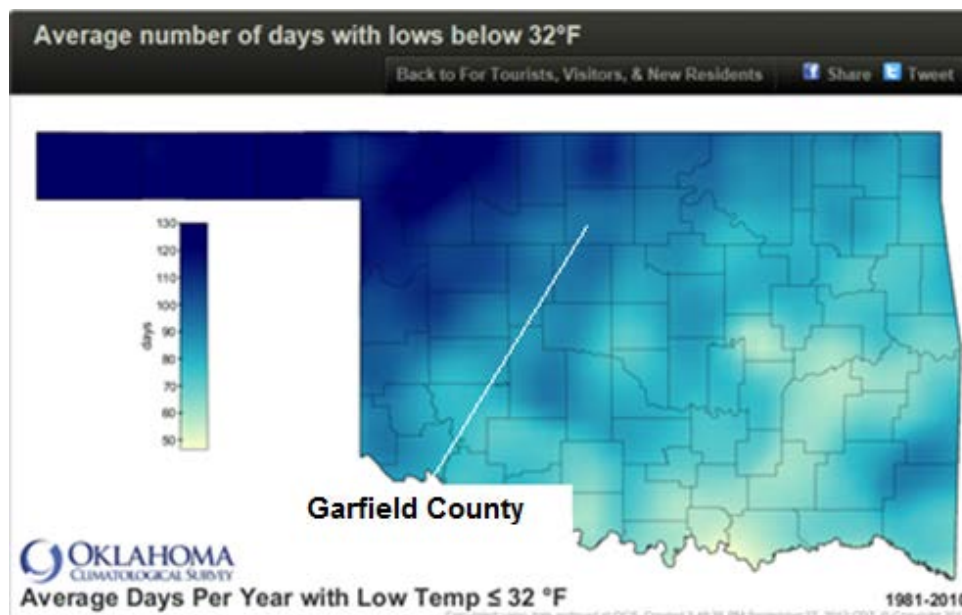
snow and ice storms. These events are extremely paralyzing to communities and the citizens affected. Garfield County has a number of citizens living in rural communities but working in Enid or at Vance Air Force Base, or other larger communities in surrounding counties. Snow and particularly ice storm events can paralyze the transportation routes.

## Extent

Heavy snow can immobilize and in fact paralyze urban and rural areas alike, stranding commuters, stopping the flow of supplies, and disrupting emergency services. The cost of snow removal, repairing damages, and loss of business can have large economic impacts on cities and towns.

### WINTER WEATHER

Lowest: -20 degrees  
(Enid, February 13, 1905)  
Average Annual Snowfall: 8.5 inches  
Days with snow on ground: 5  
Greatest Seasonal Snowfall: 36.5 inches (1909-1910)  
Greatest Daily Snowfall: 14.0 inches (Enid, December 23, 1918)  
Last Freeze in spring: April 7  
First Freeze in autumn: October 30  
Growing season: 206 Days



Garfield County is affected periodically by heavy snow and ice that cause damage in the county. Snow and ice sometimes plague the county causing road closures and limited travel. Garfield County annual average snowfall is 8.5 inches.

Wind Chills play a big part in Garfield County severe winter weather since the welfare of the public is directly related to wind chill. The Wind Chill Index was created in 1870. On November 1, 2001, the National Weather Service released a more scientifically accurate equation.

### National Weather Service Wind Chill Chart

Table 3-21

		New Wind Chill Chart														
		Equivalent Temperature °F)														
Wind Speed (mph)	calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-54
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-62
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-65
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72

"Calm-air" as used in wind chill determinations actually refers to the conditions created by a person walking briskly (at 4 miles-per-hour) under calm wind conditions.

Wind Chill is the combination of wind and temperature that serves as an estimate of how cold it actually feels to exposed human skin. Garfield County, participating jurisdictions, public schools and Autry Technology Center considers wind chill values below -5 degrees with 5 mph wind speeds to be extremely dangerous to the population although hypothermia can occur at higher temperatures and cause deaths.

The National Weather Service issues this product when the wind chill could be life threatening if action is not taken. The criterion for this warning varies from state to state. The Norman Weather Service issues a “wind chill advisory when the wind chill values of -5 F to -19F...coupled with wind speeds of 10 mph or greater are expected to occur for more than two hours.” The average wind speed in Garfield County is eleven miles per hour.

## The Sperry-Piltz Utility Ice Damage Index

**Table 3-22**

Ice Index	Radial Ice Amount (inches)	Wind (mph)	Damage and Impact Descriptions
1	< 0.25	15-25	Some localized utility interruptions possible, typically lasting only 1 or 2 hours maximum.
	0.25-0.50	< 15	
2	< 0.25	≥ 25	Scattered utility interruptions expected, typically lasting less than 8-12 hours maximum.
	0.25-0.50	15-25	
	0.50-1.00	< 15	
3	0.25-0.50	≥ 25	Numerous utility interruptions, with some damage to main feeder lines expected with outages lasting from 1-3 days.
	0.50-0.75	15-25	
	0.75-1.00	< 15	
4	0.50-0.75	≥ 25	Prolonged & widespread utility interruptions, with extensive damage to main distribution feeder lines and possibly some high voltage transmission lines. Outages expected to last more than 3 to 5 days.
	0.75-1.00	15-25	
	1.00-1.50	< 15	
5	0.75-1.00	≥ 25	Catastrophic damage to entire utility systems. Outages could last from one week to several weeks in some areas.
	1.00-1.50	15-25	
	> 1.50	< 15	

*The categories are based upon combinations of precipitation totals, temperature and wind speed.*

Minimum temperatures below 15° with winds exceeding 10 mph bring local concerns in Garfield County due to potential harm to people and animals. Wind chills of zero degrees and below are considered severe in Garfield County.

## Previous Occurrences

Garfield County and Oklahoma have been plagued with a series of major winter events during



the last decade, 2000-01; 2001-02; 2007; 2009; 2010; 2011 and now 2014. The consecutive winters of 2000-01 and 2001-02, each featured a major ice storm that deposited more than three inches of ice in 24 hours across much of Oklahoma. A similar event occurred in January 2007, included Garfield County. Trees heavy with ice fell with a loud crash sometimes falling onto power lines, causing widespread power outages,

sometimes falling on cars or even the roof of houses or businesses. Millions of dollars of damage occurred throughout Oklahoma.

**Table 3-23 GARFIELD COUNTY WINTER STORM EVENTS**  
**2000 – APRIL 2015**  
 Data from NCDC

DATE	LOCATION	DESCRIPTION
Feb 25, 2013	Garfield Co.	<b>WINTER STORM</b> - A strong winter storm system moved from west Texas into southern Oklahoma overnight on the 24th and lasted through the morning hours of the 26th. Very heavy snowfall occurred to the north and west of the upper low, mainly over parts of northwest Oklahoma. As surface low pressure strengthened over southern Oklahoma, very strong and gusty northwest winds developed, leading to blizzard conditions for several hours over much of western Oklahoma. Up to 18 inches of snow fell over parts of northern and western Oklahoma, with lesser amounts from southwest through north central and central Oklahoma. In Garfield County, rain began early during the morning of the 24th and transitioned over to snow by around noon on the 25th. Snow was heavy at times, accompanied by gusty north winds. Total snowfall ranged from around 4 inches at Vance Air Force Base, to over 8 inches several miles northwest of Enid.
Feb 21, 2013	Garfield Co.	<b>WINTER STORM</b> - The second in a series of winter storms impacted portions of northern and western Oklahoma late on the 20th as a potent upper level storm moved across western Oklahoma. A narrow corridor of snowfalls greater than one foot occurred across northwest Oklahoma, with many surrounding areas measuring between 4 and 8 inches of snow. A few spots across southeast Oklahoma also saw heavy snow before the storm eventually ended. Over 4 inches of snow were reported near Lahoma. A mix of precipitation occurred early on before heavy snow set in.

<b>Apr 10 2013</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - An unseasonably strong arctic cold front swept through Oklahoma on the afternoon and evening of April 9. Behind the front, elevated thunderstorms affected much of western and central Oklahoma as temperatures fell to near or just below freezing. As a result, some areas received minor to moderate ice accumulations, with reports of up to a quarter inch of ice accumulation on trees and elevated surfaces at Vance Air Force Base.
<b>Feb 12, 2013</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - A strong upper level storm system moved across western and central Oklahoma overnight on the 11th into the morning hours of the 12th. As cold air moved in behind the system, moderate to heavy snow fell. Areas in and around Enid saw between an inch and 2.5 inches of snow.
<b>Feb 8-9 2011</b>	Garfield Co.	<b><u>WINTER STORM</u></b> - Fresh on the heels of the record-setting blizzard that occurred a few days ago, another significant winter storm affected the southern Plains. Snowfall totals reached a foot over parts of northern Oklahoma, with widespread totals of 4 to 8 inches over the northern 2/3 of Oklahoma. A strong surface high pressure developed south out of Canada into Kansas early on the 8th behind a cold front that finally moved into northern Oklahoma during the late morning and early afternoon hours. Behind the arctic front were very cold temperatures, with temperatures falling into the single digits, and even sub-zero readings across many areas of the northern and central Plains (sub-zero temperatures would soon overspread much of Oklahoma). Precipitation, some of it heavy, developed behind the front as a strong low-level jet transported relatively warm and moister air north over-top of the front. During the day, the cold front made substantially more southward progress over the Texas panhandle into western Oklahoma, with additional heavy snow accumulations developing behind the boundary by late afternoon. Additional support for precipitation development had developed ahead of a potent mid-level disturbance that moved southeast toward Oklahoma. By mid-evening, the main snow band had developed over northern Oklahoma, with moderate to heavy snowfall occurring over the northern two or three tiers of counties for several hours. Here, widespread totals of 8 to 12 inches of snow were reported. In Garfield County, eleven to thirteen inches of snow was measured in and around Enid, and eight to nine inches measured at Vance Air Force Base. Numerous wind gusts over 30 mph were reported for several hours greatly reducing visibilities and causing considerable blowing and drifting of the snowfall.
<b>Jan 19-20 2011</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - A strong, but fast-moving disturbance moved toward the southern Plains late on the 19th. At the same time, an arctic cold front moved south, with very cold temperatures behind the boundary moved south through Oklahoma. Cloud cover thickened during the afternoon and evening hours of the 19th, keeping temperatures near freezing over northern Oklahoma for much of the day. Not much in the way of precipitation had developed until mid-evening, when radar echoes began blossoming across northern Oklahoma. Snow, sleet, and freezing drizzle began affecting areas from Woodward, to Enid, and to Stillwater by around 10 pm, but transitioned to all snow shortly after. Another significant occurrence with this event was the very cold wind chills. North winds of 15 to 20 mph, with gusts of 30 to 35 mph were common for a good part of the day.



		<p>With temperatures in the upper teens and 20s, minimum wind chills ranged from 5 to -5 degrees near and north of Interstate 40, to 5 to 15 degrees across the south. The wind also created areas of blowing/drifting snow over northern Oklahoma, which briefly reduced visibilities below one mile at times. The combination of snow/ice, temperatures, and gusty north winds made for an all-around nasty day over Oklahoma and western North Texas. Around 2.5 inches of snow accumulated at Vance Air Force Base with 1.5 inches of snow accumulated in and around Enid.</p>
<b>Jan 31-Feb 1, 2011</b>	Garfield Co.	<p><b><u>WINTER STORM</u></b> - After a relatively quiet early winter, a dose of reality, in the form of a major, record-setting winter storm, affected all of Oklahoma from late on January 31 through February 1. Periods of heavy sleet and snow, combined with winds that gusted over 40 mph, disrupted travel and closed hundreds of schools and businesses. Snowfall totals reached over a foot in some places, with snowdrifts reaching three to five foot depths. Temperatures plummeted into the single digits and lower teens, and wind chills fell well below zero. In fact, wind chill values fell below -25 degrees over parts of northwestern Oklahoma! With the cold air deepening above the surface, the precipitation was falling as snow across western and northwest Oklahoma, with a mixture of sleet and snow over southwest and central Oklahoma, and northern Texas, and freezing rain and sleet over southern Oklahoma. By 4 AM, all but southeast Oklahoma was reporting snow, with moderate to heavy snow bands setting up over western and central Oklahoma. The temperatures also continued to fall, with temperatures ranging from near 10 degrees over northern Oklahoma, to the lower to middle 20s over southeast Oklahoma, and the teens in between. The snowfall was moderate to heavy at times, with some areas from central into northeast Oklahoma reporting snowfall rates of 2-3 inches per hour. The winter storm mainly produced snow and sleet, and freezing rain was less widespread and fell in shorter durations. As a result, ice accumulations were kept at a minimum, reducing the number of power outages across Oklahoma. Three to five inches of snow was around the county, including Enid. Wind gusts occasionally over 50 mph also created considerable blowing and drifting of the snowfall, which reduced visibilities. The event began during the evening hours of 1/31.</p>
<b>Mar 19-20, 2010</b>	Garfield Co.	<p><b><u>WINTER STORM</u></b> - A strengthening upper level storm system moved east southeastward from northeast New Mexico to near the Red River and the Arkansas. At the same time, a strong late season cold front moved south across Oklahoma, dramatically dropping temperatures to near or below freezing over a large part of the state. The track of the storm system took a near optimal route for heavy snowfall for areas north of Interstate 40. Rain that formed behind the front quickly changed to a wintry mix, and then to all snow by early morning. The heaviest snow occurred over north central into parts of eastern Oklahoma, where at least four to seven inches occurred. Widespread amounts of three to five inches fell from western into central Oklahoma, including much of the Oklahoma City metro area. The snowfall was accompanied by strong winds, with gusts over 40 mph. The blowing snow created drifts that were several feet deep, and travel was impacted with reduced visibilities. Three to four inches of snow accumulated across the county. Numerous wind gusts of 35 to 40</p>

		mph reduced visibilities well below one mile at times. Several accidents occurred due to the poor road conditions. Snowdrifts up to three feet deep were reported. Several east/west roadways had to be closed due to blowing and drifting snow.
<b>Jan 6 2010</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - A very strong cold front moved through Oklahoma, beginning late in the afternoon over northwest Oklahoma, and continuing southeast through the late evening hours. Temperatures ahead of the front were in the 40s, but quickly fell well below freezing within a couple of hours of the frontal passage. After sunset, a brief period of light freezing rain developed behind the front. The freezing rain changed to very light snow after one or two hours, but enough glaze accumulated on roadways and power lines to cause minor problems. Several accidents were reported, mainly over western and northwest Oklahoma. Slick roadways contributed to several minor accidents west of Enid. No injuries were reported with the accidents.
<b>Jan 28-29 2010</b>	Garfield Co.	<b><u>WINTER STORM</u></b> - A major winter storm impacted much of Oklahoma beginning on the morning of January 28th and continued through much of the day. Behind the front, temperatures were falling back into the 30s and 40s, and the freezing line at the surface was very near the Kansas-Nebraska border. Overnight, and into the morning of January 28th, the cold front pushed through most of Oklahoma and all of western North Texas. The cold front had stalled to the south in northern Texas leaving a shallow cold air mass in place across much of the area to the north of the front, with the cold air gradually deepening towards northern Oklahoma. As an upper level low became better organized in the southwestern United States, it helped draw warm, moist air north from the Gulf of Mexico. This warm air was lifted over the dome of cold air and contributed to the development of widespread precipitation during the morning across much of Oklahoma. In Garfield County, minor accumulations of glaze occurred during the late morning and early afternoon hours before changing to sleet and snow. The precipitation decreased in intensity during the late afternoon and early evening, but redeveloped for the overnight hours. Five to six inches of snow and sleet accumulated on top of the glaze by sunrise. The sleet and snow occasionally mixed with freezing drizzle, creating additional problems with glaze accumulations on elevated surfaces.
<b>Jan 26-27 2009</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - A significant winter storm affected much of Oklahoma beginning around sunrise on the 26th and continuing through much of the 27th. Precipitation in the form of drizzle and freezing drizzle overspread the northwest half of the state, and by mid-morning travel problems were being reported, especially along the Interstate 44 corridor. The precipitation over northwest Oklahoma began to mix with sleet and snow, although amounts were relatively light. Wintry precipitation continued through the day and into the overnight hours. Amounts still remained light, but glaze on the roads created more widespread travel problems. Sleet eventually became the dominant precipitation type. An inch of snow accumulated in and around Enid. Prior to the snow, about an eighth of an inch of glaze accumulated. Over 50 accidents, 10 of them major, were reported as a result of the slick roadways. No injuries were reported.

<b>Dec 24, 2009</b>	Garfield Co.	<b><u>WINTER STORM</u></b> - A powerful winter storm developed over parts of the Southern Plains, resulting in one of the most widespread and damaging blizzards to affect Oklahoma in decades. Blizzard conditions affected the vast majority of northern, central, and southwest Oklahoma for at least 5 to 7 hours. A surface low pressure center intensified rapidly over northern Texas, leading to severe, blustery winds during the morning and afternoon hours. Rain began falling during the early morning hours over southwest Oklahoma and progressed northeast. The rain quickly changed to sleet and freezing rain, and then to all snow as temperatures fell into the 20s. By late morning over southwest Oklahoma and the early afternoon over the rest of Oklahoma, winds were sustained around 40 mph, with frequent wind gust of 50 to 60+ mph. Snowfall rates approached two inches per hour at times for some locations, and the visibilities were frequently less than 100 feet. Thousands of people were stranded in their cars for several hours, and many abandoned their vehicles, littering the roads and highways. This made snow removal more difficult, and roads were slow to reopen. The strong winds, combined with the below freezing temperatures, allowed for wind chill temperatures to drop to near zero. This made it even more dangerous for people that were abandoning their vehicles. Three to five inches of snow fell around the county, with the higher totals across the southern half of the county. Frequent wind gusts of 45 to 55 mph caused considerable blowing and drifting snow, and greatly reducing visibilities.
<b>Dec 27, 2008</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - Light snow developed over northern Oklahoma on the 27th. The snow lasted through the morning, with most areas reporting one to three inches of snow accumulation. Two inches of snow accumulation were reported in Enid
<b>Dec 9, 2008</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - A strong cold front moved southeast through Oklahoma during the overnight hours of the 8th into the early hours of the 9th. Temperatures quickly fell below freezing by the morning. Precipitation developed over the northern Texas panhandle and moved east. Snow started falling over northwest Oklahoma before sunrise and spread east through the day. Most areas over the northern third of Oklahoma reported between one and three inches. Two inches of snow accumulated in Hillsdale, and 1.5 inches was reported in Enid and Drummond. Blowing and drifting snow was also reported. Numerous accidents were reported in the town of Enid, although no injuries were reported.
<b>Dec 27-28 2008</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - Surface low pressure developed and moved over the Red River region of Oklahoma and pushed east into southeast Oklahoma. Precipitation developed north of this low pressure during the late evening of the 27th and early morning of the 28th. Sufficient cold air was in place that a variety of winter weather moved over the northern half of Oklahoma. Mostly snow fell over the northern third to fourth of Oklahoma, with a wide swath of one to three inches accumulating. One to two inches of snow accumulated around the county.
<b>Jan 12-14, 2007</b>	Garfield Co.	<b><u>WINTER STORM</u></b> - A strong winter storm crippled much of Oklahoma from January 12th through the 14th, spreading snow, freezing rain and sleet across the state. The snow and sleet was confined to northern and western Oklahoma. the prolonged period of wintry precipitation closed airports, schools, malls, and

		other places of business. The slick and hazardous roads caused many schools to remain closed for several days after the winter precipitation had ended.
<b>Nov 23 2007</b>	Garfield Co.	<b><u>WINTER WEATHER</u></b> - Precipitation mainly in the form of snow developed over the Texas panhandle and moved east toward the northern half of Oklahoma. Cold temperatures at near or just above freezing allowed for the precipitation to remain in the form of snow as it entered western Oklahoma during the late morning hours of the 23rd. The precipitation was not widespread, but did contain pockets of brief moderate snowfall. The snow moved east during the afternoon hours before exiting by early in the evening. Totals were generally less than two inches, although a few locations received as much as four inches. A caller reported near 1 inch of snow near Garber. The emergency manager reported up to 2 inches of snow near Enid.
<b>Dec 9-11 2007</b>	Garfield Co.	<b><u>ICE STORM</u></b> - A devastating ice storm affected a large swath of Oklahoma beginning on the 9th and continuing through the 11th over parts of the area. The storm left behind a trail of severe damage to trees and power lines, which in turn led to the worst power outage in Oklahoma history (in terms of the number of people impacted). This was because the worst of the ice storm affected the urban corridor from near Lawton, to Oklahoma City, to Tulsa, and northeast into Missouri. The storm began with a strong cold front that moved through the northern half of Oklahoma on the 8th, and then moved south through the rest of the state during the day on the 9th. South of the front, an almost tropical air mass was in place with temperatures in the 60s and 70s. Showers and thunderstorms were ongoing over central and southwest Oklahoma early on the 9th, but were developing and moving above a layer of freezing air at the surface. However, as the cold front moved south, the cold air undercut the thunderstorms, which became the start of many waves of freezing showers and thunderstorms. The very moist air mass south of the front continued to move over top of the shallow cold air mass through 11th. Due to the magnitude of the outage, electrical crews from dozens of states worked 12-hour shifts daily to restore power. Even with this huge relief effort, more than 150,000 residents were still without power one week later. Even city water and sewage plants were without power, making them unable to pump water for a short time. Schools, churches, and local businesses had to close, some for several days due to the power outages. Christmas parades and area sporting events had to be rescheduled or canceled all together. Final exams at area colleges were also postponed. The local economy took a huge hit as the ice storm hit during a key weekend for holiday sales. The pecan crop loss alone was estimated at \$25 million statewide. Shelters were opened across the state for people who did not have electricity, which many took advantage of. The storm cleanup was estimated to cost at least \$200 million statewide. In Garfield County hundreds were without power due to at least a quarter of an inch of ice on trees, power lines, and power poles. The slick roads also caused numerous car accidents. No injuries were reported with the accidents. This classic setup created one of the most costly ice storms in Oklahoma history. By the time the storm had ended, over one inch of ice had accumulated over a good portion of Oklahoma.

		The governor declared a State of Emergency for all 77 Oklahoma counties.
<b>Dec 3-4 2002</b>	Garfield Co.	<b><u>WINTER STORM</u></b> - A winter storm affected the northwest half of Oklahoma during the afternoon and evening of the 3rd and early morning of the 4th. The precipitation started as freezing rain and sleet across portions of west central and northwest Oklahoma, including Harper, Ellis, Woodward, Woods, Alfalfa, and Major Counties, and then quickly changed to snow. Total accumulations were between four and eight inches.
<b>Jan 30-31 2002</b>	Garfield Co.	<b><u>ICE STORM</u></b> - Freezing rain began across the northwest third of the state during the evening of the 29th with significant accumulations of ice developing shortly after midnight on the 30th. Freezing rain shifted southward during the early morning of the 30th with moderate to occasionally heavy freezing rain occurring in a 50 to 60 mile wide band, extending from north central Oklahoma, near Ponca City and Perry, southwestward toward Enid, Kingfisher, Oklahoma City, Weatherford, Anadarko, and Hobart. In many areas, the freezing rain continued for 12 to 24 hours, with ice accumulations of 1 to 2 inches commonly observed. As the end of the storm neared, freezing rain transitioned to sleet and snow across Harper, Ellis, Woods, and Woodward Counties, with only a brief transition to sleet across central Oklahoma, including areas along and near Interstate 35. The worst damage resulting from ice accumulations occurred from near Ponca City, Blackwell, Red Rock, Perry, and Stillwater, southwestward through Enid, Canton, Watonga, Hennessey, Kingfisher, and Guthrie, to near Clinton, Weatherford, El Reno, northwest side of Oklahoma City, Edmond, Cordell, Binger, and Minco. The damage was catastrophic in places, with thousands of utility poles brought down by the weight of the ice, along with thousands of trees. Dozens of towns were left completely without power for days, with some residents expected to be without power for weeks.
<b>Mar 1-2 2002</b>	Garfield Co.	<b><u>WINTER STORM</u></b> - A winter storm affected most of western and central Oklahoma during the evening of the 1st and the early morning of the 2nd. The precipitation started as a mixture of freezing rain and snow across northern Oklahoma, and eventually transitioned to all snow, where between two and four inches of snow were reported, along with a small amount of ice. The highest snowfall total was 4.5 inches in Enid (Garfield County).
<b>Jan 28, 2001</b>	Garfield Co.	<b><u>ICE STORM</u></b> - A winter storm provided an average of 4 to 7 inches of snow across portions of northwest Oklahoma during the morning and afternoon of the 28th, from near Arnett in Ellis County northeastward to just west of Alva in Woods County. From northern Roger Mills County northeastward through Woodward in Woodward County, up to 4 inches of snow fell. Between 1/4 and 1 inch of ice with some snow fell from southwest Oklahoma, near Hollis and Mangum, northeastward through Kingfisher, Enid, and Ponca City. Approximately 18,000 people lost power during the storm.
<b>Dec 26, 2000</b>	Garfield Co	<b><u>WINTER STORM</u></b> - A major winter storm developed during the evening of the 25th across all of western, central, and southeast Oklahoma, with significant accumulations of snow and ice beginning shortly after 0000 CST on the 26th. Mainly snow fell across northwest Oklahoma with accumulations between 8 and



		12 inches reported. Snow amounts varied widely across the rest of northwest Oklahoma with 4 to 8 inches falling across portions of Dewey and Custer Counties, and only 1 to 2 inches across Woods and Alfalfa Counties, however even in areas where snow amounts were light, significant disruptions in travel and power outages were reported. A broad zone of a mixture of snow, sleet, and freezing rain fell to the east of the above-mentioned area. Four to 8 inches of a snow/sleet mixture fell from near Enid and Weatherford southwestward to Elk City. Statewide, near 170,000 residents were without electricity on the 26th and 27th.
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## Probability of Future Events

Oklahoma's location between the cold winter temperatures of the Rocky Mountains and the moisture from the Gulf of Mexico gives Oklahoma the potential for further ice and snow events. Northwest Oklahoma receives more snow annually than most of Oklahoma. In recent years, there has been more damage from ice storms than from snowfall. Based on recent past history, the probability of future winter storms in Garfield County, participating jurisdictions, public schools and Autry Technology Center is **Likely**.

## Vulnerability and Impact

Residents in Garfield County have been inundated with a series of major ice and snowstorms during the last decade. Ice storms typically have lasted several hours to days, sometimes combined with heavy accumulations of ice. The icy cover can down power lines telephone poles and lines, and communication towers and large tree limbs which sometimes cause additional damage. The cost is often millions of dollars in damage and widespread power outages. Significant icing events occur with nearly the same frequency as heavy snow events. While ice accumulation is normally less than an inch, storms depositing several inches of ice have occurred. Most electric and telephone lines in Garfield County are still above ground including major transmission lines. These events, the results of which generally last several days to several weeks are extremely paralyzing to communities and the citizens affected.



Winter storms are sometimes accompanied by strong winds which create blizzard conditions with blinding wind-driven snow, severe drifting, and dangerous wind chill. Strong winds with these intense storms can knock down trees, utility poles, and power lines. Communications and power can be disrupted for days while utility companies work

to repair the extensive damage. Rural area residents may be without power several weeks before the power companies can get power to them. In extreme cases, especially those involving elderly, handicapped, or very young, it is necessary to move them to shelters where they can stay until they can return home. Even though shelters are provided as soon as possible, some citizens arrange with friends or relatives in unaffected areas for temporary lodging and/or care. This is inconvenient, and the temporary loss of population along with inaccessible roads for essential services and shopping cause critical economic shortages to businesses that are able to open.

Heavy accumulations of snow can collapse building roofs in addition to knocking down trees and power lines. In rural areas, homes and farms may be isolated for days, and unprotected livestock may be lost. Moderate to heavy snow can immobilize vehicle traffic in urban areas such as Enid and paralyze rural communities, strand commuters, stop the flow of supplies, and disrupt emergency services. The cost of snow removal, repairing damages, and loss of business can have large economic impacts on cities and towns.

Extreme cold often accompanies a winter storm or is left in its wake. Prolonged exposure to the cold can cause frostbite or hypothermia and become life threatening. Infants and elderly people are most susceptible. Freezing temperatures can cause severe damage to crops and other critical vegetation. Pipes may freeze and burst in homes or businesses that are poorly insulated or without heat. Structure fires occur more frequently in the winter due to lack of proper safety precautions and present a greater danger because water supplies may freeze and impede firefighting efforts. Icy roads may also impede firefighting. People die of hypothermia from prolonged exposure to the cold. Indigent and elderly people are most vulnerable to winter storms and account for the largest percentage of hypothermia victims largely due to improperly vented or unheated homes, but the leading cause of death during winter storms is from automobile accidents. Even small accumulations of ice may cause extreme hazards to motorists and pedestrians who are not familiar with how to deal with the icy conditions.

The school staff and students are vulnerable to winter weather due to slips and trips on snow and ice and the extreme cold that often accompanies winter weather events. Pipes freezing and busting, loss of power due to downed power lines or other mishaps are vulnerabilities to the schools. Accidents to students and staff cause pain and suffering, and loss time from class. Frozen pipes are an added expense along with the water damage that occurs when the pipes

thaw out. Lost power, depending on the length of the power outage may cause school closings for part of a day to many days or weeks.

## Conclusions

Heavy snow and/or ice usually immobilize transportation facilities, stranding commuters, stopping the flow of supplies, and disrupting emergency services. Accumulations of snow/ice can collapse older, weaker buildings and knock down trees and power lines. In



rural areas, homes and farms may be isolated for days, and unprotected livestock may be lost. The cost of snow removal, repairing damages, and loss of business can have large economic impacts on the cities and towns in Garfield County.

## References

(NCDC) National Climatic Data Center (<http://www.ncdc.noaa.gov/stormevents/>)  
(NWS) National Weather Service – Norman <http://www.srh.noaa.gov/oun/>  
(OCS)Oklahoma Climatological Survey (<http://climate.mesonet.org/>)

## Long Range Growth and Post Disaster Redevelopment

Garfield County is located in the central part of the state, and the population is largely rural. A majority of the county's land use is designated as agricultural. The largest city, Enid, is located in central Garfield County. Land uses within the urban areas of the county consist of industrial, manufacturing, general business and education. The rural areas of the county are primarily ranching and farming although some industry is located in rural areas outside city or town limits.

As shown in the population segment of Chapter One, the communities of Breckinridge, Carrier, Drummond, Enid, Hillsdale, Kremlin, Lahoma, and North Enid have shown population increases since the census in 2000.

## Analyzing Development Trends

In reviewing past development and growth in Garfield County, it is likely the growth pattern during the near future will show continued development although slow. The incorporated areas

within the county are generally not losing population and the possibility of expanding the town or city limits exists although no plans to do so exist currently. Schools are also generally growing and as needed plan to add or modify additional buildings to adequately house and provide necessary facility.

The highest area of construction and development is in The City of Enid and Enid Public Schools. Most of the building construction is private single-family structures. The figures that follow are unofficial but provide a general idea of building trends over the last five years. Some of the smaller communities not showing any permits since 2005 either do not issue building permits or have not had a request for any.

### **Single Family Residential Permits – 2005 – 2012 (latest available)**

#### **Carrier housing building permits (unofficial)**

#### **Covington housing building permits (unofficial)**

#### **Douglas housing building permits (unofficial)**

#### **Drummond housing building permits (unofficial)**

#### **Enid housing building permits (unofficial)**

- 2005: 69 buildings, average cost: \$202,600
- 2006: 95 buildings, average cost: \$136,300
- 2007: 83 buildings, average cost: \$156,300
- 2008: 55 buildings, average cost: \$150,900
- 2009: 35 buildings, average cost: \$273,500
- 2010: 70 buildings, average cost: \$225,100
- 2011: 19 buildings, average cost: \$239,700
- 2012: 27 buildings, average cost: \$278,900

#### **Fairmont housing building permits (unofficial)**

#### **Garber housing building permits (unofficial)**

#### **Hillsdale housing building permits (unofficial)**

#### **Hunter housing building permits (unofficial)**

#### **Kremlin housing building permits (unofficial)**

- 2005 0 buildings
- 2006 0 buildings
- 2007: 0 buildings
- 2008: 1 building, cost: \$50,000
- 2009 1 building, cost \$50,000
- 2010 0 buildings
- 2011 0 buildings
- 2012 0 buildings

#### **Lahoma housing building permits (unofficial)**

#### **North Enid housing building permits (unofficial)**

- 2005: 3 buildings, average cost: \$233,300
- 2006: 2 buildings, average cost: \$230,000
- 2007: 4 buildings, average cost: \$280,000
- 2008: 4 buildings, average cost: \$252,500
- 2009: 2 buildings, average cost: \$222,500
- 2010: 1 buildings, average cost: \$169,000
- 2011: 5 buildings, average cost: \$134,000
- 2012: 0 buildings

### Waukomis housing building permits (unofficial)

- 2005 0 buildings, average cost: \$135,000
  - 2006 0 buildings
  - 2007 0 buildings
  - 2008 0 buildings
- ☐ 2009: 1 building, cost: \$190,000
  - ☐ 2010: 3 buildings, average cost: \$159,700
  - ☐ 2011: 2 buildings, average cost: \$330,000
  - ☐ 2012: 2 buildings, average cost: \$330,000

The availability of sewer, water, electricity, utilities, and roads regulates new residential growth for any area. Private companies provide most of those services to residents and businesses throughout the county. The future quality and availability of electricity and water is good in the county and no major problems are anticipated.

Post disaster redevelopment caused by an event will follow normal development patterns unless drastic steps have to be taken for the safety of citizens. The availability of utilities and roads would also be affected in the redevelopment criteria

The economic pressures, stability of the area and historical facts have contributed to the conclusions reached in this section. Growth factors evident from the 2000 census listing Garfield County population as 57,813 versus the 2010 census estimate of 60,580 (4.7% increase) support this position. An Oklahoma Department of Commerce 2012 Demographic State of the State Report (Projections through 2075) provides insight to future populations in Oklahoma and Garfield County. The report projects Oklahoma's population in 2075 at 5,560,007 (2010 population was 3,751,351). The following table projects Garfield County's population in 2075:



*Population projections*

Garfield							
<b>2012</b>	59,615	<b>2028</b>	60,356	<b>2044</b>	61,098	<b>2060</b>	61,839
<b>2013</b>	59,661	<b>2029</b>	60,402	<b>2045</b>	61,144	<b>2061</b>	61,885
<b>2014</b>	59,707	<b>2030</b>	60,449	<b>2046</b>	61,190	<b>2062</b>	61,932
<b>2015</b>	59,754	<b>2031</b>	60,495	<b>2047</b>	61,237	<b>2063</b>	61,978
<b>2016</b>	59,800	<b>2032</b>	60,541	<b>2048</b>	61,283	<b>2064</b>	62,024
<b>2017</b>	59,846	<b>2033</b>	60,588	<b>2049</b>	61,329	<b>2065</b>	62,071
<b>2018</b>	59,893	<b>2034</b>	60,634	<b>2050</b>	61,376	<b>2066</b>	62,117
<b>2019</b>	59,939	<b>2035</b>	60,680	<b>2051</b>	61,422	<b>2067</b>	62,163
<b>2020</b>	59,985	<b>2036</b>	60,727	<b>2052</b>	61,468	<b>2068</b>	62,210
<b>2021</b>	60,032	<b>2037</b>	60,773	<b>2053</b>	61,515	<b>2069</b>	62,256
<b>2022</b>	60,078	<b>2038</b>	60,819	<b>2054</b>	61,561	<b>2070</b>	62,302
<b>2023</b>	60,124	<b>2039</b>	60,866	<b>2055</b>	61,607	<b>2071</b>	62,349
<b>2024</b>	60,171	<b>2040</b>	60,912	<b>2056</b>	61,654	<b>2072</b>	62,395
<b>2025</b>	60,217	<b>2041</b>	60,958	<b>2057</b>	61,700	<b>2073</b>	62,441
<b>2026</b>	60,263	<b>2042</b>	61,005	<b>2058</b>	61,746	<b>2074</b>	62,488
<b>2027</b>	60,310	<b>2043</b>	61,051	<b>2059</b>	61,793	<b>2075</b>	62,534

Source: Oklahoma Department of Commerce

Expanded emphasis for long range and post disaster redevelopment is unwarranted at this time.

## **CHAPTER FOUR**

### **Mitigation Strategies**

#### **Local Hazard Mitigation Goals**

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The Garfield County Hazard Mitigation Planning Team reviewed and analyzed the goals of the plan and found them unclear in their intent. The goals were redefined at the first team meeting and reviewed following risk assessment studies. The goals listed below were determined to reflect the objectives of Garfield County, the participating jurisdictions and the State of Oklahoma in reducing the impact of hazards throughout the county. The goals and suggested actions were developed by the Hazard Mitigation Planning Team with the assistance of the chief elected officials of each entity. The selected projects should address these listed goals.

**Goal 1: Protect lives and property.**

**Goal 2: Improve public awareness of threatening hazards.**

**Goal 3: Minimize effects of natural hazards on Garfield County residents.**

During the risk assessment phase of the planning process, the Garfield County Hazard Mitigation Planning Team evaluated various mitigation strategies that could be feasible for use in Garfield County. Historical references from residents concerning flooding and specific locations were discussed. Research and references to the print media proved to be ineffective, due to their lack of archive material. The most reliable local historical information available was contained in archives of the Emergency Management Offices in Garfield County and local jurisdictions, federally declared disasters (FEMA website) and National Climatic Data Center (NCDC) records. Wildfire data was collected from the Oklahoma State Fire Marshal's office. The selection of the projects was based on the cost benefit of the action and what could be done in the community. Each community will make their decision at the time of implementation based upon the community's capability at the time.

#### **National Flood Insurance Program Participation**

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Garfield County, Covington, Drummond, Enid, Garber, Hunter, Kremlin, Lahoma, and North Enid are currently participating members of the NFIP. The Towns of Carrier, Douglas, Fairmont, and Hillsdale have never been mapped and are not a member of the NFIP. These communities are not listed as Participating or Non-Participating in the FEMA National Flood Insurance Program Community Status Book. The Town of Waukomis has been mapped, has

never been a member of the NFIP and is listed as Non-Participating with a Sanction Date of 02/04/78 in the Community Status Book. Schools are not eligible for NFIP participation but their flood insurance rates are based upon the participation of their community. The following table shows the current status of each jurisdiction in the NFIP.

<b>Jurisdiction</b>	<b>Current Effective Map Date</b>	<b>Regular or Emergency Date</b>
Garfield County	06/19/12	09/21/91
Covington	06/19/12	05/01/85
Drummond	NSFHA	01/08/08
Enid	06/19/12	03/15/79
Garber	06/19/12	08/05/85
Hunter	NSFHA	05/25/78
Kremlin	06/19/12	05/25/78
Lahoma	06/19/12	08/27/93
North Enid	06/19/12	04/01/81
Carrier	Not Mapped	
Douglas	Not Mapped	
Fairmont	Not Mapped	
Hillsdale	Not Mapped	
<b>Jurisdiction</b>	<b>Current Effective Map Date</b>	<b>Sanction Date</b>
Waukomis	06/19/12	02/04/78

Garfield County, Covington, Drummond, Enid, Garber, Hunter, Kremlin, Lahoma, and North Enid will maintain a Floodplain Administrator/Coordinator, maintain their status as a member in good standing of the NFIP, continue to enforce floodplain ordinances, and update their floodplain ordinances as required to maintain NFIP eligibility.

Garfield County, Covington, Drummond, Enid, Garber, Hunter, Kremlin, Lahoma, and North Enid are members of the NFIP and, as such, the citizens of Garfield County and member jurisdictions are eligible to purchase flood insurance through the NFIP. This is an economical advantage to the citizens of Garfield County. Flood insurance through independent insurance carriers would be prohibitive due to cost, if available at all. Garfield County, Covington, Drummond, Enid, Garber, Hunter, Kremlin, Lahoma, and North Enid will continue their participation in the NFIP and continue to maintain and update floodplain ordinances in line with

NFIP requirements. Floodplain ordinances will continue to be enforced in Special Flood Hazard Areas (SFHAs) to maintain compliance with NFIP requirements. County, city, and town officials will continue to promote and encourage flood insurance and public participation in the NFIP.

## **Mitigation Action Plan**

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This chapter identifies specific actions to achieve the goals of unincorporated Garfield County; the incorporated City of Enid and the towns of Carrier; Covington; Douglas; Drummond; Fairmont; Garber; Hillsdale; Hunter; Kremlin; Lahoma; North Enid; and Waukomis, all Public School Districts in Garfield County; and Autry Technology Center, an appropriate lead person for each action, funding sources, and related hazards.

During the risk assessment phase of the planning process, the Garfield County Hazard Mitigation Planning Team evaluated various mitigation strategies that may be feasible in Garfield County. The selection of the projects was based on the benefits and cost effectiveness of the action and what could be done in the county and participating communities.

## **Mitigation Projects**

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Many of the mitigation projects identified would offer relief for multiple hazards. Outdoor warning devices most certainly would be significant during tornado warning periods. Also, this means could be utilized for flash flooding alerts. Low water bridges, if corrected, would not only improve transportation for residents during heavy rain periods, but would provide a more direct route for use by responders than is currently utilized. Certainly, sheltering would have multiple hazard usage. Each project listed below shows the related hazards.

Weather Radios, FEMA recommends anyone living in a part of the country that has any potential for severe weather events, keep such a radio on at all times. Garfield County, participating jurisdictions, public schools and Autry Technology Center all have a risk of severe weather events. NOAA Weather Radios are one of the most economical projects a jurisdiction can do to provide early warning to citizens and save lives. A lot of the hazards covered by this plan and many more are broadcast over the National Weather Radio network. Some of the broadcast include but are not limited to: High Winds, Hail, Tornado, Flood, Winter Weather (wind chill, frost, freezes), Extreme heat, Earthquake, Wildfire, Landslide, Severe Thunderstorm, Fog warnings and many more.

*Info from National Weather Service and FEMA web sites (See picture below)*



Photo by Marilee Caliendo - Feb 17, 2013

[Download](#) [Photo Details](#) [Image Usage Guide](#)

Petal, Miss., Feb. 18, 2013 — This weather radio is on at the Petal Disaster Recovery Center as a necessary safety precaution. FEMA advises anyone that lives in a part of the country that has any potential for severe weather events, keep such a radio on at all times. Photo by Marilee Caliendo/FEMA - Location: Petal, MS

## Current Mitigation Projects

The following projects are the currently in progress, continuing, deferred, and new projects that were included in the action projects for the 2014 Garfield County update. Although all projects may not currently be fundable through HMGP grant funding, HMGP is listed as a possible funding source in the event of changes in future fundable project eligibility.



### **Action Project 1 - Purchase light tower trailer (New Infrastructure)**

<b>Description</b>	Improve firefighting capabilities by purchasing lighting and other equipment to enable rural fire fighters to better fight wild fires at night.
<b>Hazards Addressed</b>	Wildfire
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	Rural Fire Departments, County Commissioners
<b>Estimated Completion</b>	One year with approved funding
<b>Funding Sources</b>	HMGP, USDA
<b>Current Action Status</b>	Deferred due to lack of funding

### **Action Project 2 – Reduce Damage To Roads/Bridges Due To Flooding - (Existing Infrastructure)**

<b>Description</b>	Raise the Schultz bridge on Skeleton Creek. Rising water damages the bridge as debris is trapped beneath the bridge. Water is also forced around the bridge and repeatedly destroys the approach of the bridge.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County Commissioners
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, OK Department of Transportation
<b>Current Action Status</b>	Deferred, lack of funding

### **Action Project 3 – Reduce Damage To Roads/Bridges Due To Flooding - (Existing Infrastructure)**

<b>Description</b>	Raise the Castelle Bridge on Otter Creek. Rising water damages the bridge as debris is trapped beneath the bridge. Water is also forced around the bridge and repeatedly destroys the approach of the bridge.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County Commissioners
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, OK Department of Transportation
<b>Current Action Status</b>	Deferred due to funding

### **Action Project 4 – NOAA Weather Radio's (New and Existing Buildings)**

<b>Description</b>	Distribute battery operated weather radios to residents to help ensure that these households are kept informed of potential flooding, tornadoes, and other hazards. Weather radios are the fastest and most efficient way to inform residents of potential danger. Weather radios may also be the only source of weather information and warnings to residents whose telephone and electrical services are disrupted by a severe weather event.
<b>Hazards Addressed</b>	Dam Failure, Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County,
<b>Responsible Party</b>	Emergency Management, County Commissioners
<b>Estimated Completion</b>	24 months with funding
<b>Funding Sources</b>	HMGP, CDBG
<b>Current Action Status</b>	Ongoing, some radios distributed, others needed

### **Action Project 4A – NOAA Weather Radio's (New and Existing Buildings)**

<b>Description</b>	Distribute battery operated weather radios to residents to help ensure that these households are kept informed of potential flooding, tornadoes, and other hazards. Weather radios are the fastest and most efficient way to inform residents of potential danger. Weather radios may also be the only source of weather information and warnings to residents whose telephone and electrical services are disrupted by a severe weather event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Breckinridge, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Emergency Management, Local Elected Officials
<b>Estimated Completion</b>	24 months with funding
<b>Funding Sources</b>	HMGP, CDBG
<b>Current Action Status</b>	Deferred, lack of funding

### **Action Project 4B – NOAA Weather Radio's (New and Existing Buildings)**

<b>Description</b>	Distribute battery operated weather radios to residents to help ensure that these households are kept informed of potential flooding, tornadoes, and other hazards. Weather radios are the fastest and most efficient way to inform residents of potential danger. Weather radios may also be the only source of weather information and warnings to residents whose telephone and electrical services are disrupted by a severe weather event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Drummond PS, Cimarron PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	Emergency Management, School Administration
<b>Estimated Completion</b>	24 months with funding
<b>Funding Sources</b>	HMGP, CDBG
<b>Current Action Status</b>	Deferred, lack of funding

### **Action Project 4C – NOAA Weather Radio's (New and Existing Buildings)**

<b>Description</b>	Distribute battery operated weather radios to residents to help ensure that these households are kept informed of potential flooding, tornadoes, and other hazards. Weather radios are the fastest and most efficient way to inform residents of potential danger. Weather radios may also be the only source of weather information and warnings to residents whose telephone and electrical services are disrupted by a severe weather event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Emergency Management, Local Elected Officials
<b>Estimated Completion</b>	24 months with funding
<b>Funding Sources</b>	HMGP, CDBG
<b>Current Action Status</b>	Deferred, lack of funding

### **Action Project 4D – NOAA Weather Radio's (New and Existing Buildings)**

<b>Description</b>	Distribute battery operated weather radios to residents to help ensure that these households are kept informed of potential flooding, tornadoes, and other hazards. Weather radios are the fastest and most efficient way to inform residents of potential danger. Weather radios may also be the only source of weather information and warnings to residents whose telephone and electrical services are disrupted by a severe weather event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Covington-Douglas PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS
<b>Responsible Party</b>	Emergency Management, Local Elected Officials, School Administration
<b>Estimated Completion</b>	24 months with funding
<b>Funding Sources</b>	HMGP, CDBG
<b>Current Action Status</b>	Deferred, lack of funding

### **Action Project 5 - Improve Outdoor Warning Systems (New and Existing Infrastructure)**

<b>Description</b>	Purchase and install early warning devices (storm sirens) as needed to provide advance notice to residents of an impending hazardous event. Replace older outdated sirens with technologically advanced sirens to provide better updated warning capabilities.
<b>Hazards Addressed</b>	Tornado, High Winds
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	Rural Fire Departments, Emergency Management, County Commissioner Districts, Local Elected Officials, School Administration
<b>Estimated Completion</b>	18 months per funded unit
<b>Funding Sources</b>	HMGP
<b>Current Action Status</b>	Some sirens have been installed, others are still needed

### **Action Project 6 – Eradicate Eastern Red Cedars**

<b>Description</b>	Continue education of public on the hazards of Cedar trees and associated dangers. Remove cedar trees from road side right of ways.
<b>Hazards Addressed</b>	Drought, Wildfire
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	NRCS, County Conservation Districts, Rural Fire Departments
<b>Estimated Completion</b>	Up to 36 months with approved funding depending on site
<b>Funding Sources</b>	NRCS, County Conservation Districts, HMGP
<b>Current Action Status</b>	Ongoing education, work deferred due to lack of funding



### **Action Project 7 – Reduce and control Cedar tree encroachment**

<b>Description</b>	Obtain additional funding for Cedar Eradication Program along county right of ways.
<b>Hazards Addressed</b>	Drought, Wildfire
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County Commissioners, NRCS, County Conservation Districts, Rural Fire Departments
<b>Estimated Completion</b>	Up to 36 months with approved funding depending on site
<b>Funding Sources</b>	NRCS, County Conservation Districts, HMGP
<b>Current Action Status</b>	Deferred due to lack of funding

### **Action Project 8 – Educate Residents on Construction Techniques (New and Existing Buildings)**

<b>Description</b>	Educate residents on construction techniques and materials that better withstand natural hazards.
<b>Hazards Addressed</b>	Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Rural Fire Departments, County Emergency Management, Local elected officials
<b>Estimated Completion</b>	Ongoing and continuing
<b>Funding Sources</b>	FEMA, Current County and Local Budgets
<b>Current Action Status</b>	Ongoing and continuing as funding and materials are available

### **Action Project 8A – Educate Residents on Construction Techniques (New and Existing Buildings)**

<b>Description</b>	Educate residents on construction techniques and materials that better withstand natural hazards.
<b>Hazards Addressed</b>	Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Rural Fire Departments, County Emergency Management, Local elected officials
<b>Estimated Completion</b>	Ongoing and continuing
<b>Funding Sources</b>	FEMA, Current County and Local Budgets
<b>Current Action Status</b>	Ongoing and continuing as funding and materials are available

### **Action Project 9 - Increase public awareness of flood prone areas (Existing Infrastructure)**

<b>Description</b>	Prepare and/or distribute information to increase public awareness of areas that are prone to flooding, how they can reduce their loss, and the advantages and benefits of NFIP flood insurance.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Garfield County Floodplain Management, local elected officials
<b>Estimated Completion</b>	Ongoing and continuing
<b>Funding Sources</b>	HMGP, County and local budgets
<b>Current Action Status</b>	Ongoing and continuing with available funding and materials

### **Action Project 10 – Public Information on Tornadoes (New and Existing Buildings)**

<b>Description</b>	Prepare and/or distribute information to educate the public on how to protect themselves against tornadoes, including publicizing programs on personal storm shelters and how to obtain them. Distribute to school students to carry home.
<b>Hazards Addressed</b>	Tornado
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Cimarron PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	Rural Fire Departments, County Emergency Management
<b>Estimated Completion</b>	Annually with available funding
<b>Funding Sources</b>	HMGP, local and county funds, Insurance Companies
<b>Current Action Status</b>	In progress and continuing as resources become available

### **Action Project 11 – Communications Repeater (New Infrastructure)**

<b>Description</b>	Purchase and install a communications repeater to improve communications throughout the county prior to, during and following a hazard event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County Emergency Management, County Commissioners, County Sheriff, local law enforcement, fire departments
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, Homeland Security, CDBG, local and county funds
<b>Current Action Status</b>	Deferred due to lack of funding

### **Action Project 12 – CERT Team Training**

<b>Description</b>	Assemble interested groups and provide CERT training to prepare volunteers to help themselves, their community, and emergency responders during and following a hazard event.
<b>Hazards Addressed</b>	Earthquake, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	County and local emergency management, elected officials
<b>Estimated Completion</b>	12 months with funding
<b>Funding Sources</b>	Homeland Security, county and local funds
<b>Current Action Status</b>	Deferred for lack of funding

### **Action Project 13 – Community / School Safe Rooms (New Buildings)**

<b>Description</b>	Install safe rooms in schools and critical facilities and as needed to provide a safe place for city, town, and county employees, students and staff, emergency responders and the public.
<b>Hazards Addressed</b>	High Wind, Tornado
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	County Commissioners, Emergency Management, Local elected officials, school administrators
<b>Estimated Completion</b>	36 months per location with approved funding
<b>Funding Sources</b>	HMGP, CDBG, county and local funds
<b>Current Action Status</b>	Deferred do to lack of funding

### **Action Project 14 – EOC Safe Room (New Buildings)**

<b>Description</b>	Construct a safe room to provide a safe place for emergency operations prior to, during and following a hazardous event.
<b>Hazards Addressed</b>	Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	Emergency management, county commissioners
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, county funds
<b>Current Action Status</b>	Deferred due to lack of funding

### **Action Project 15 – Covered Walkways At Schools (New and Existing Buildings)**

<b>Description</b>	Install covered walkways to provide protection for students and staff where exposed to the elements during class changes.
<b>Hazards Addressed</b>	Extreme Heat, Hail, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	School Administrators
<b>Estimated Completion</b>	30 months with approved funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update



### **Action Project 16 – Drainage Channel Improvements (Existing Infrastructure)**

<b>Description</b>	Straighten, deepen, widen, line drainage channels as needed to provide faster drainage and runoff of rainwater to prevent backup and flooding.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Drummond, Enid, Lahoma, Waukomis, Cimarron PS, Drummond PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	Floodplain Administrator, county commissioners, local elected officials, school administrators
<b>Estimated Completion</b>	24 months per project with approved funding
<b>Funding Sources</b>	HMGP, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 17 – Additional Water Wells (New Infrastructure)**

<b>Description</b>	Drill water wells as needed to provide an alternate source of water and/or as a source of water for fighting wildfires.
<b>Hazards Addressed</b>	Drought, Wildfire
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	County Commissioners, local elected officials
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, CDBG, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 18 – Dry Hydrants (New Infrastructure)**

<b>Description</b>	Install dry hydrants in ponds and lakes where needed to allow for water transfer to fill firefighting apparatus for quicker turn around when fighting wild fires.
<b>Hazards Addressed</b>	Wildfire
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis,
<b>Responsible Party</b>	County Commissioners, local elected officials, local fire departments
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, USDA, CDBG, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 19 – Surge Protection (Electronics)**

<b>Description</b>	Install surge protection and uninterruptable power supplies where needed to provide protection for critical electronic equipment to ensure continued communications and prevent the loss of critical information during power surges and short power interruptions.
<b>Hazards Addressed</b>	Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	Emergency Management, County Commissioners, Local elected officials
<b>Estimated Completion</b>	12 months with funding
<b>Funding Sources</b>	HMGP, CDBG, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 19A – Surge Protection (Electronics)**

<b>Description</b>	Install surge protection and uninterruptable power supplies where needed to provide protection for critical electronic equipment to ensure continued communications and prevent the loss of critical information during power surges and short power interruptions.
<b>Hazards Addressed</b>	Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	School Administrators
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 20 – Elevate Flood Prone Roadways (Existing Infrastructure)**

<b>Description</b>	Elevate roadways that flood continuously preventing egress and/or delayed response by emergency responders.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Drummond, Enid, Garber, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	Floodplain Administrator, County Commissioners, Local elected officials
<b>Estimated Completion</b>	18 – 30 months per location with approved funding
<b>Funding Sources</b>	HMGP, ODOT, County highway fund, County and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 21 – Emergency Management Program**

<b>Description</b>	Develop/improve emergency management programs to provide for better response and local control during hazard events.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Emergency Management, County and local elected officials
<b>Estimated Completion</b>	Continuing as needed
<b>Funding Sources</b>	Homeland Security, County and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 21A – Emergency Management Program**

<b>Description</b>	Develop/improve emergency management programs to provide for better response and local control during hazard events.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Emergency Management, Local elected officials
<b>Estimated Completion</b>	Continuing as needed
<b>Funding Sources</b>	Homeland Security, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 21B – Emergency Management Program**

<b>Description</b>	Develop/improve emergency management programs to provide for better response and local control during hazard events.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	School administration
<b>Estimated Completion</b>	Continuing as needed
<b>Funding Sources</b>	Homeland Security, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 22 – Alternate Power Supply (Generators) (New and Existing Infrastructure)**

<b>Description</b>	Install emergency backup power supplies (generators) on critical facilities to ensure continued operations during and after a hazardous event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Emergency Management, County Commissioners, Local elected officials
<b>Estimated Completion</b>	24 months per location with approved funding
<b>Funding Sources</b>	HMGP, CDBG, county and local funds
<b>Current Action Status</b>	New project for plan update



### **Action Project 22A – Alternate Power Supply (Generators) (New and Existing Infrastructure)**

<b>Description</b>	Install emergency backup power supplies (generators) on critical facilities to ensure continued operations during and after a hazardous event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Emergency Management, Local elected officials
<b>Estimated Completion</b>	24 months per location with approved funding
<b>Funding Sources</b>	HMGP, CDBG, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 22B – Alternate Power Supply (Generators) (New and Existing Infrastructure)**

<b>Description</b>	Install emergency backup power supplies (generators) on critical facilities to ensure continued operations during and after a hazardous event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Drummond PS, Cimarron PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	School Administrators
<b>Estimated Completion</b>	24 months per location with approved funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 22C – Alternate Power Supply (Generators) (New and Existing Infrastructure)**

<b>Description</b>	Install emergency backup power supplies (generators) on critical facilities to ensure continued operations during and after a hazardous event.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Covington-Douglas PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS
<b>Responsible Party</b>	School Administrators
<b>Estimated Completion</b>	24 months per location with approved funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 23 – Family Emergency Supply Kits (Go-Kits)**

<b>Description</b>	Work with citizens to help them identify and locate items to assemble an emergency supply kit to enable them to provide for themselves for 72 hours following a natural disaster.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Emergency Management, County commissioners, local elected officials
<b>Estimated Completion</b>	Annually
<b>Funding Sources</b>	HMGP, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 23A – Family Emergency Supply Kits (Go-Kits)**

<b>Description</b>	Work with citizens to help them identify and locate items to assemble an emergency supply kit to enable them to provide for themselves for 72 hours following a natural disaster.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Breckinridge, Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Emergency Management, local elected officials
<b>Estimated Completion</b>	Annually
<b>Funding Sources</b>	HMGP, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 24 – Fan Distribution System**

<b>Description</b>	Work with VOADS and other distributors to locate and identify citizens in need of fans during periods of extreme heat.
<b>Hazards Addressed</b>	Extreme Heat
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	VOADS, County Commissioners, local elected officials
<b>Estimated Completion</b>	Annually
<b>Funding Sources</b>	Local businesses, Voads
<b>Current Action Status</b>	New project for plan update

### **Action Project 25 – Floodplain Management Program (New Buildings and Infrastructure)**

<b>Description</b>	Work with communities that are not currently members of the NFIP to assist them in development of their floodplain management program and become members of the NFIP.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Douglas, Fairmont, Hillsdale, Hunter, Kremlin
<b>Responsible Party</b>	Local elected officials, County floodplain coordinator
<b>Estimated Completion</b>	36 months with funding
<b>Funding Sources</b>	FEMA, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 26 – GPS Identification and Mapping (New Infrastructure)**

<b>Description</b>	Purchase GPS mapping software and equipment needed to map location of critical facilities, location of safe rooms, etc.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County Commissioners
<b>Estimated Completion</b>	36 months with funding
<b>Funding Sources</b>	HMGP, county funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 27 – Hail Resistant Roofing (New and Existing Buildings)**

<b>Description</b>	As roofs are replaced/repaired on critical facilities, hail resistant materials will be used.
<b>Hazards Addressed</b>	Hail
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	County Commissioners, Local elected officials, school administration
<b>Estimated Completion</b>	As needed
<b>Funding Sources</b>	HMGP, CDBG, county, local, and school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 28 – Hazard Awareness and Education Book**

<b>Description</b>	Develop, produce, and distribute a booklet detailing all hazards that the citizens of Garfield County are at risk from, how to prepare for them, what actions to take when they occur, and steps to recover afterwards.
<b>Hazards Addressed</b>	Dam Failure, Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	Emergency Management, County Commissioners
<b>Estimated Completion</b>	Annually with funding
<b>Funding Sources</b>	HMGP, county funds
<b>Current Action Status</b>	New project for plan update



### **Action Project 28A – Hazard Awareness and Education Book**

<b>Description</b>	Develop, produce, and distribute a booklet detailing all hazards that the citizens of Garfield County are at risk from, how to prepare for them, what actions to take when they occur, and steps to recover afterwards.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Local elected officials
<b>Estimated Completion</b>	Annually with funding
<b>Funding Sources</b>	HMGP, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 28B – Hazard Awareness and Education Book**

<b>Description</b>	Develop, produce, and distribute a booklet detailing all hazards that the citizens of Garfield County are at risk from, how to prepare for them, what actions to take when they occur, and steps to recover afterwards.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Local elected officials
<b>Estimated Completion</b>	Annually with funding
<b>Funding Sources</b>	HMGP, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 28C – Hazard Awareness and Education Book**

<b>Description</b>	Develop, produce, and distribute a booklet detailing all hazards that the citizens of Garfield County are at risk from, how to prepare for them, what actions to take when they occur, and steps to recover afterwards.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Drummond PS, Cimarron PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	School administrators
<b>Estimated Completion</b>	Annually with funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 28D – Hazard Awareness and Education Book**

<b>Description</b>	Develop, produce, and distribute a booklet detailing all hazards that the citizens of Garfield County are at risk from, how to prepare for them, what actions to take when they occur, and steps to recover afterwards.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Covington-Douglas PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS,
<b>Responsible Party</b>	School administrators
<b>Estimated Completion</b>	Annually with funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 29 – Individual Safe Room Rebate Program (New and Existing Buildings)**

<b>Description</b>	Institute a rebate program to reimburse citizens part of the cost of installing a safe room in their residence so they can shelter in place.
<b>Hazards Addressed</b>	Tornado, High Winds
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	County Commissioners, Emergency management, Local elected officials
<b>Estimated Completion</b>	36 months with funding
<b>Funding Sources</b>	HMGP, county and local funds, citizens
<b>Current Action Status</b>	New project for plan update

### **Action Project 30 – Lightning Detection System (New Infrastructure)**

<b>Description</b>	Install lightning detection systems in areas where outdoor activities normally occur to provide early lightning detection and warning for the safety of citizens.
<b>Hazards Addressed</b>	Lightning
<b>Participating Jurisdictions</b>	Garfield County, Breckenridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	Emergency Management, County Commissioners, Local elected officials, school administration
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, CDBG, county, local, and school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 31 – Lightning Suppressors at Critical Facilities (New and Existing Buildings)**

<b>Description</b>	Install lightning suppressors on critical facilities to provide protection to the facilities and contents from lightning strikes.
<b>Hazards Addressed</b>	Lightning
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	County Commissioners, Local elected officials, school administrators
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, county, local, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 32 – Mass Notification System (New Infrastructure)**

<b>Description</b>	Purchase a mass communications system to provide quick contact to citizens and be able to provide emergency warnings of pending hazards/disasters in a timely manner.
<b>Hazards Addressed</b>	Dam Failure, Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County Commissioners
<b>Estimated Completion</b>	36 months with funding
<b>Funding Sources</b>	HMGP, County funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 32A – Mass Notification System (New Infrastructure)**

<b>Description</b>	Purchase a mass communications system to provide quick contact to citizens and be able to provide emergency warnings of pending hazards/disasters in a timely manner.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	Local elected officials
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 32B – Mass Notification System (New Infrastructure)**

<b>Description</b>	Purchase a mass communications system to provide quick contact to citizens and be able to provide emergency warnings of pending hazards/disasters in a timely manner.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Breckinridge, Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Local elected officials
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, local funds
<b>Current Action Status</b>	New project for plan update



### **Action Project 32C – Mass Notification System (New Infrastructure)**

<b>Description</b>	Purchase a mass communications system to provide quick contact to citizens and be able to provide emergency warnings of pending hazards/disasters in a timely manner. Schools could use the system to notify parents of school closings and/or emergencies.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Drummond PS, Cimarron PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	School administration
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 32C – Mass Notification System (New Infrastructure)**

<b>Description</b>	Purchase a mass communications system to provide quick contact to citizens and be able to provide emergency warnings of pending hazards/disasters in a timely manner. Schools could use the system to notify parents of school closings and/or emergencies.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Chisolm PS, Covington-Douglas PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS
<b>Responsible Party</b>	School administration
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 33 – Motorist Information Signs (Portable) (New Infrastructure)**

<b>Description</b>	Purchase portable motorist information signs for use in warning motorist of dangerous conditions such as flooding, bridge failure, slick roads, burn bans in effect, etc.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Flood, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	County Commissioners, local elected officials
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, County and Local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 33A – Motorist Information Signs (Portable) (New Infrastructure)**

<b>Description</b>	Purchase portable motorist information signs for use in warning motorist of dangerous conditions such as flooding, bridge failure, slick roads, burn bans in effect, etc.
<b>Hazards Addressed</b>	Drought, Earthquake, Extreme Heat, Hail, High Wind, Lightning, Tornado, Wildfire, Winter Storm
<b>Participating Jurisdictions</b>	Covington, Douglas, Fairmont, Garber, Hillsdale, Hunter, Kremlin, North Enid
<b>Responsible Party</b>	Local elected officials
<b>Estimated Completion</b>	18 months with approved funding
<b>Funding Sources</b>	HMGP, local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 34 – Recurring Flood Properties (Existing Buildings)**

<b>Description</b>	Identify and locate properties that are prone to flooding and identify measures to prevent flooding or remove from area of flooding, purchase, demolish and turn into open space, etc.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	County floodplain administrator, county and local elected officials
<b>Estimated Completion</b>	24 months per identified property with funding
<b>Funding Sources</b>	HMGP, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 35 – Retention Ponds (New Infrastructure)**

<b>Description</b>	Construct flood retention ponds to help control water runoff and control/prevent flooding.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	County floodplain administrator, county and local elected officials
<b>Estimated Completion</b>	18 months per location with funding
<b>Funding Sources</b>	HMGP, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 36 – Rip Rap to Mitigate Erosion (Existing Infrastructure)**

<b>Description</b>	Install rip rap to prevent bank erosion or bridge embankment wash out from flooding events where needed and to improve drainage along roads that frequently wash out with heavy rains.
<b>Hazards Addressed</b>	Flood
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Drummond, Enid, Lahoma, Waukomis
<b>Responsible Party</b>	County floodplain administrator, county and local elected officials
<b>Estimated Completion</b>	24 months per location with approved funding
<b>Funding Sources</b>	HMGP, county and local funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 37 – Routine Dam Inspections (Existing Infrastructure)**

<b>Description</b>	Inspect low and medium hazard dams on a regular basis to prevent dam failure and possible road flooding.
<b>Hazards Addressed</b>	Dam Fail
<b>Participating Jurisdictions</b>	Garfield County
<b>Responsible Party</b>	County floodplain administrator
<b>Estimated Completion</b>	Bi-Annually
<b>Funding Sources</b>	County funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 38 –Sheltering for Emergency Response Equipment/Supplies (New Infrastructure)**

<b>Description</b>	Construct protective covering for equipment used in response and recovery actions to protect that equipment from hazards.
<b>Hazards Addressed</b>	Extreme Heat, Hail, High Wind, Lightning, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	County Commissioners, local elected officials, school administration
<b>Estimated Completion</b>	36 months with funding
<b>Funding Sources</b>	HMGP, CDBG, county, local, and school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 39 – Vegetation Management**

<b>Description</b>	Provide information on methods of vegetation management to protect residences and other structures from wildfire.
<b>Hazards Addressed</b>	Drought, Wildfire
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis
<b>Responsible Party</b>	County commissioners, local elected officials, local fire departments
<b>Estimated Completion</b>	18 months per location identified with approved funding
<b>Funding Sources</b>	USDA, HMGP, county and local funds
<b>Current Action Status</b>	New project for plan update



### **Action Project 40 – Window Film (Existing Infrastructure)**

<b>Description</b>	Install window film on critical facilities to protect occupants and contents from flying debris and broken glass during disaster events. The use of uv film will also protect against extreme heat and cold lowering utility cost.
<b>Hazards Addressed</b>	Earthquake, Hail, High Wind, Tornado
<b>Participating Jurisdictions</b>	Garfield County, Breckinridge, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	Emergency Management, county commissioners, local elected officials, school administration
<b>Estimated Completion</b>	36 months with approved funding
<b>Funding Sources</b>	HMGP, county, local, and school funds
<b>Current Action Status</b>	New project for plan update

### **Action Project 41 – Evacuation Plan for Critical Facilities**

<b>Description</b>	Prepare and post evacuation plans in critical facilities.
<b>Hazards Addressed</b>	Earthquake, Tornado, Winter Storm
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	County Commissioners, local elected officials, school administration
<b>Funding Sources</b>	County, local, and school funds
<b>Estimated Completion</b>	12 months per facility where identified as needed
<b>Current Action Status</b>	New project for plan update

### **Action Project 42 – Water Saving Fixtures (New and Existing Buildings)**

<b>Description</b>	Install water saving fixtures in critical facilities during new construction or when replacing current fixtures.
<b>Hazards Addressed</b>	Drought
<b>Participating Jurisdictions</b>	Garfield County, Carrier, Covington, Douglas, Drummond, Enid, Fairmont, Garber, Hillsdale, Hunter, Kremlin, Lahoma, North Enid, Waukomis, Chisolm PS, Cimarron PS, Covington-Douglas PS, Drummond PS, Enid PS, Garber PS, Kremlin-Hillsdale PS, Pioneer-Pleasant Vale PS, Waukomis PS, Autry Technology Center
<b>Responsible Party</b>	County Commissioners, local elected officials, school administration
<b>Funding Sources</b>	HMGP, County, local, and school funds
<b>Estimated Completion</b>	As needed
<b>Current Action Status</b>	New project for plan update

### **Completed Mitigation Projects**

Many of the action projects have had action taken on them but are still needed and therefore incomplete. Actions such as weather radios and educational actions are on-going and continuing as needed and funding becomes available.

### **Deleted Mitigation Projects**

### **Action Project - Establish County fund dedicated for meeting needs during and after a County-wide disaster.**

<b>Description</b>	Establish a fund that can be used to hire contractors and rent equipment to begin cleanup / debris removal.
<b>Current Action Status</b>	DELETE – not feasible project

### **Action Project – School Safe Room**

<b>Description</b>	Safe room for school @ Drummond PS.
<b>Current Action Status</b>	Combined with like project including all schools

## **Prioritization**

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The Garfield County Hazard Mitigation Planning Team identified several hazard mitigation projects to be included in the Hazard Mitigation Plan. These projects, along with the responsible agency, possible funding sources, and the hazards mitigated were listed previously. Due to the addition of multiple projects to the hazard mitigation plan, the GCHMPT determined that re-prioritization of mitigation projects was needed. Local growth and development has been slowly rising, although; at this time has had no effect on the prioritization of action projects.

The Garfield County Hazard Mitigation Planning Team discussed the implementation of action projects in great detail and how they would be prioritized. Consideration was given to the cost-benefit of the projects (what benefits the project provided as compared to the cost of the project). Social and political factors were also considered (would the public at large and the elected officials support or oppose the project), and many other factors. All of the participants on the Hazard Mitigation Team representing the jurisdictions participating in the Garfield County Hazard Mitigation Plan agreed that the priority for implementing action projects will depend on:

1. Available funding; and 2. Public and political pressures at the time projects are chosen.

## **CHAPTER FIVE**

### **PLAN MAINTENANCE**

#### **Monitoring, Evaluating, and Updating Plan**

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The Garfield County Emergency Manager is the chairman of the GCHMPT and will be the primary person responsible for overseeing the Hazard Mitigation Plan and coordinating with the other jurisdictions where changes to their other planning mechanisms might enhance or interact with the Hazard Mitigation Plan.

The plan will be monitored, evaluated and updated annually during the five-year cycle with the assistance of Garfield County's contractor. This will also occur at any time there is a disaster in order to determine the effectiveness in or changes to programs that might affect mitigation priorities. Beginning on the fourth year, the Garfield County Emergency Management Director will make all plan revisions final and submit the updated Hazard Mitigation Plan to the State of Oklahoma Hazard Mitigation Division and FEMA for review and approval six months before the end of the fifth year so that the jurisdictions will maintain eligibility.

The following individuals will be responsible for monitoring and evaluating the plan, mitigation activities, and coordinating with County Emergency Management.

- The Town of Breckinridge Mayor
- The Town of Carrier Mayor
- The Town of Covington Mayor
- The Town of Douglas Mayor
- The Town of Drummond Mayor
- The City of Enid City Manager
- The Town of Fairmont Mayor
- The Town of Garber Mayor
- The Town of Hillsdale Mayor
- The Town of Hunter Mayor
- The Town of Kremlin Mayor
- The Town of Lahoma Mayor
- The Town of North Enid Mayor
- The Town of Waukomis Mayor
- School Superintendents / Administrators

The individuals listed above will perform any necessary monitoring site visits on a monthly basis and will also be the lead contact for phone calls, scheduling of meetings, and will:

- Monitor the hazard analysis for changes and additions;
- Monitor objectives and determine if they meet current and expected hazardous conditions;
- Determine if there are any implementation problems such as social, technical, administrative, political, legal, economic, and environmental or coordination issues with other agencies.

The individuals listed above will evaluate the Natural Hazard Mitigation Plan every year to determine the effectiveness and/or progress of mitigation actions and the implementation of other actions.

Items covered during the evaluation process should include:

- Evaluate magnitude of risk and determine if it has changed;
- Evaluate current resources and determine if they are appropriate for implementing mitigation actions;
- Determine if there were any implementation problems, such as technical, political, legal, or coordination issues with other agencies;
- Evaluate goals, objectives, and current or expected conditions;
- Evaluate how other agencies and partners have participated;
- Evaluate mitigation actions and determine if outcome occurred as expected:
  - Was the intended purpose of the original mitigation action met?
  - Was the mitigation action met in the proposed timeline?
  - Did the listed agencies participate in the mitigation action?
  - Did the mitigation action stay within the proposed budget?

The above listed individuals will perform site visits as needed on projects involving their jurisdictions and will work closely with the County Emergency Manager to monitor and evaluate the Hazard Mitigation Plan.

Additionally, the County Emergency Management Director will give the Garfield County Commissioners an update report annually. The report will highlight the results of the previously mentioned activities. The plan will remain an active and relevant document with continued public participation.



## **Implementation through Existing Programs/Capability Improvement**

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### **Garfield County:**

The Emergency Operations Plan was reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of this plan where applicable. None of the annual updates of the EOP were found to have an effect on the Hazard Mitigation Plan.

The Emergency Management Director will be responsible for monitoring the Emergency Operations Plan and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Emergency Management Director will give the Garfield County Commissioners monitoring reports annually. Changes from the Hazard Mitigation Plan and Emergency Operations Plan will be incorporated as applicable. The plan will remain an active and relevant document with continued public participation.

The County Emergency Manager is responsible for updating the EOP on an annual basis. As changes are made to the HMP they will be incorporated into the EOP at the annual update and noted in the HMP for change at the five year update. Changes made to the EOP are submitted to the County Commissioners for review and approval before being sent to the State Emergency Management Office.

Garfield County, participating jurisdictions, and public schools have other plans and capabilities as shown on the capability assessment sheets in Chapter 1. The county emergency manager (chairman of the planning team) will invite all participating members of the GCHMPT to participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update. As the five year update draws near the meetings will be held quarterly.

The county emergency manager, local emergency managers, school representatives and other stakeholders will continue their education in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect the county, participating jurisdictions, and school districts.

Garfield County will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Garfield County.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Breckinridge:**

The Town of Breckinridge is a small town with no other plans in place to consider in conjunction with the Hazard Mitigation Plan. They will continue to participate in the Hazard Mitigation Planning process however.

The Town of Garber will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Garber.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Carrier:**

The Town of Carrier is a small town with a population of less than 100 people. Carrier has an Emergency Operations Plan, Comprehensive Master Plan, Storm water Management Plan, and a Community Wildfire Protection Plan that were reviewed and updated as scheduled/needed.

Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of these plans where applicable. None of the annual updates of the EOP were found to have an effect on the Hazard Mitigation Plan. Information from the Stormwater Management Plan and Community Wildfire Protection Plans were used in the identification of hazards for the risk assessment.

The Mayor is responsible for monitoring the Emergency Operations Plan, Comprehensive Master Plan, Storm water Management Plan, and a Community Wildfire Protection Plan and integrating the Hazard Mitigation Plan into them along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan and listed plans will be incorporated as applicable.

Carrier will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update. Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing policies annually to increase ability to better withstand the impacts of hazards. Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Carrier.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **Town of Covington:**

The Town of Covington is a small town with an Emergency Operations Plan that was reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual updates of the plan where applicable. None of the annual updates of the EOP were found to have an effect on the Hazard Mitigation Plan.

The Town Mayor is responsible for monitoring the Emergency Operations Plan and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan, Emergency Operations Plan will be incorporated as applicable.

The Town of Covington will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Review existing plans, ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Covington.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **Town of Douglas:**

The Town of Douglas is a small town with no other plans in place to consider in conjunction with the Hazard Mitigation Plan. The Town of Douglas follows state building codes. They will continue to participate in the Hazard Mitigation Planning process.

The Town of Douglas will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Review existing policies annually to increase ability to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Douglas.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **Town of Drummond:**

The Town of Drummond is a small town with an Emergency Operations Plan that was reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of this plan where applicable. None of the annual updates of the EOP were found to have an effect on the Hazard Mitigation Plan.

The Town Mayor is responsible for monitoring the Emergency Operations Plan and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Mayor will

coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan and Emergency Operations Plan will be incorporated as applicable.

Drummond will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Drummond.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **City of Enid:**

The Ordinances and following plans were reviewed and considered;

- **Comprehensive Master Plan**
- **Capital Improvement Plans (CIP)**
- **Emergency Operations Plan**
- **Continuity of Operations Plan**
- **Stormwater Management Plan**

Also reviewed were the: zoning ordinances; subdivision ordinance and floodplain ordinance. Staffing at this time appears to be adequate although additional staff in the future may be necessary in Enid.

Information obtained through the risk assessment of the Hazard Mitigation Plan will be used in the annual update of those plans. Information from those plans and the City Codes and Ordinances was considered in the Hazard Mitigation Plan update. Information from the CIP was used in the development of projects and the stormwater plan helped to identify flooding locations.



The Emergency Manager is responsible for monitoring the Emergency Operations Plan, other plans, and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. Changes from the Hazard Mitigation Plan and other plans will be incorporated as applicable. The plan will remain an active and relevant document with continued public participation.

The City Manager will coordinate with the emergency manager to ensure the other plans integrate pertinent information from the hazard mitigation plan and updating the plans on an annual basis. As changes are made to the HMP they will be incorporated into the other plans at the annual update and noted in the HMP for change at the five year update.

Enid will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update. Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect the City of Enid.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **Town of Fairmont:**

The Town of Fairmont is a small town with an Emergency Operations Plan and a Wildfire Protection Plan that were reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of this plan where applicable. None of the annual updates of the EOP were found to have an effect on the Hazard Mitigation Plan. Information from the Wildfire Protection Plan was used to identify wildfire threat to the Town of Fairmont.

The Town Mayor is responsible for monitoring the Emergency Operations Plan and Wildfire Protection Plan and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to

ensure changes from the Hazard Mitigation Plan, Emergency Operations Plan, and Wildfire Protection Plan will be incorporated as applicable.

The Town of Fairmont will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing policies annually to increase their ability to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Fairmont.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **Town of Garber:**

The Town of Garber is a small town with no other plans in place to consider in conjunction with the Hazard Mitigation Plan. They will continue to participate in the Hazard Mitigation Planning process however.

The Town of Garber will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five-year update

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Garber.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Hillsdale:**

The Town of Hillsdale is a small town with no other plans in place to consider in conjunction with the Hazard Mitigation Plan. They will continue to participate in the Hazard Mitigation Planning process however.

The Town of Hillsdale will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Hillsdale.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Hunter:**

The Town of Hunter is a small town with an Emergency Operations Plan that was reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of the Emergency Operations Plan where applicable. None of the annual updates of the EOP were found to have an effect on the Hazard Mitigation Plan.

The Town Mayor is responsible for monitoring the Emergency Operations Plan and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan and other plans will be incorporated as applicable.

The Town of Hunter will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Hunter.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Kremlin:**

The Town of Kremlin is a small town with an Emergency Operations Plan and a Comprehensive Master Plan that were reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of these plans where applicable. None of the annual updates of the EOP and Comprehensive Master Plan were found to have an effect on the Hazard Mitigation Plan.

The Town Mayor is responsible for monitoring the Emergency Operations Plan, Comprehensive Master Plan, and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan and other plans will be incorporated as applicable.

The Town of Kremlin will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Kremlin.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Lahoma:**

The Town of Lahoma is a small town with no other plans in place to consider in conjunction with the Hazard Mitigation Plan. They will continue to participate in the Hazard Mitigation Planning process however.

The Town of Lahoma will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Lahoma.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of North Enid:**

The Town of North Enid is a small town with an Emergency Operations Plan and a Comprehensive Master Plan that were reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of these plans where applicable. None of the annual updates of the EOP and Comprehensive Master Plan were found to have an effect on the Hazard Mitigation Plan.

The Town Mayor is responsible for monitoring the Emergency Operations Plan, Comprehensive Master Plan, and integrating the Hazard Mitigation Plan into it along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan and other plans will be incorporated as applicable.



The Town of North Enid will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect North Enid.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Town of Waukomis:**

The Town of Waukomis is a medium size town with an Emergency Operations Plan, Continuity of Operations Plan, Comprehensive Master Plan, Wildfire Protection Plan and Stormwater Management Plan that were reviewed and updated as scheduled/needed. Information obtained through the risk assessment of the Hazard Mitigation Plan was used in the annual update of these plans where applicable. None of the annual updates of these plans were found to have an effect on the Hazard Mitigation Plan. Information from the wildfire and stormwater plans was used in the risk assessment.

The Town Mayor is responsible for monitoring the other plans and integrating the Hazard Mitigation Plan into them along with any updates on an annual basis. The Mayor will coordinate with the County Emergency Management Director to ensure changes from the Hazard Mitigation Plan and other plans will be incorporated as applicable.

The Town of Waukomis will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five-year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Review existing ordinances and policies annually to increase ordinances to better withstand the impacts of hazards.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Waukomis.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Chisolm Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The School District Comprehensive Master Plan was used to identify areas of potential growth within the district and recommend mitigation actions as part of future development plans. The school districts Capital Improvements Plan was used in the determination of possible mitigation projects. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Chisholm PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Chisholm PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Cimarron Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The school district does not have Comprehensive or Capital Improvements Plans. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Cimarron PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Cimarron PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Covington-Douglas Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an

emergency event. The School District has no Comprehensive Master Plans. The school districts Capital Improvements Plan was used in the determination of possible mitigation projects. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Covington-Douglas PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Covington-Douglas PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

#### **Drummond Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The School District has no Comprehensive Master Plans. The school districts Capital Improvements Plan was used in the determination of possible mitigation projects. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each

principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Drummond PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Drummond PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Enid Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The School District Comprehensive Master Plan and Economic Development Plan were used to identify areas of potential growth within the district and recommend mitigation actions as part of future development plans. The school districts Capital Improvements Plan was used in the determination of possible mitigation projects. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Enid PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.



Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Enid PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Garber Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The school district does not have a Comprehensive Master Plan, Capital Improvements Plan or other plans for consideration. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Garber PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Garber PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Kremlin-Hillsdale Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The School District has no Comprehensive Master Plans. The school districts Capital Improvements Plan was used in the determination of possible mitigation projects. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Kremlin-Hillsdale PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Kremlin-Hillsdale PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Pioneer-Pleasant Vale Public School District:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The School District Comprehensive Master Plan was used to identify areas of potential growth within the district and recommend mitigation actions as part of future

development plans. The school districts Capital Improvements Plan was used in the determination of possible mitigation projects. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Pioneer-Pleasant Vale PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Pioneer-Pleasant Vale PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

### **Waukomis Public School District**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The District long range plan was used to identify areas of potential growth within the district and recommend mitigation actions as part of future development plans. The school district does not have a Capital Improvements Plan. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into

other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Waukomis PS will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Waukomis PS.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**Autry Technology Center:**

Information from the school EAP was incorporated throughout the hazard analysis of this plan when explaining the capability of the school district to respond to and recover from an emergency event. The District long range plan was used to identify areas of potential growth within the district and recommend mitigation actions as part of future development plans. The school district does not have a Capital Improvements Plan. Future versions of the Hazard Mitigation Plan will be incorporated into other planning processes.

The school superintendent is responsible for bringing mitigation ideas and actions to the school board for discussion and approval. The school superintendent will continue to be the official responsible for review and update of the Hazard Mitigation plan, and ensuring its integration into other plans and processes. On an annual basis, the school superintendent will meet with each principle to discuss hazard mitigation priorities for the district. Any updates to the hazard mitigation plan will be made at this time and incorporated into the annual update of the Plan.

Autry Technology Center will participate in meetings annually to discuss mitigation planning and for reviewing the hazard mitigation plan, suggestions on changes, and additions needed for the five year update.

Comply with its published schedule of planning to insure that identified mitigation action items are considered during planning and budgeting sessions as well as following a disaster declaration which might provide funding for projects.

Continue education of personnel in the area of emergency management and mitigation planning to better enable them to identify and mitigate the multitude of hazards both natural and others that affect Autry Technology Center.

Monitor various web sites that publish grant announcements and funding opportunities to locate and apply for other sources of funding for mitigation projects.

**School Districts/Autry Technology Center:**

The public school districts as well as the technology centers are governed by rules, regulations and laws of the State of Oklahoma. State statutes at Section 487.3. Emergency Preparedness Grants (74 O.S. § 51.2a) and (74 O.S. § 51.2b) provides that through the Department of Homeland Security grants, these learning institutions will be provided funding through grants to:

1. Public schools, private schools, technology center schools, and institutions of higher learning in the State of Oklahoma to encourage greater emergency preparedness, including, but not limited to, improvement of plans and procedures for natural and man-made disaster and emergencies, improvement of security on campus, at events, and with regard to buses and other transportation, and improvement of communications strategies and equipment; and
2. Local law enforcement, emergency management, disaster relief, and public health entities in the State of Oklahoma to encourage the active engagement of such entities with public schools, private schools, technology center schools, and institutions of higher learning in their efforts to improve emergency preparedness.

These institutions are tasked with preparing and maintaining planning mechanisms to provide enhanced preparedness and security for their campuses. These plans are updated on a yearly basis. In the planning process, their active hazard mitigation plan will be incorporated into other plans which meet state regulated criteria. Some of the plans are submitted through the Oklahoma Department of Education, while others are submitted and approved through the Department of Homeland Security. Information contained in all of the plans is inter-mingled to insure that all plans have common, updated data and directives. These plans will also be shared with the local emergency managers in order to assure that all relevant emergency agencies share the same guidance when responding to emergencies or disasters. The need for



better places of refuge during tornado events was made evident through review of the emergency action plans.

## **Continued Public Participation and Involvement**

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Public participation is an important part of the planning process and public input or the lack thereof can be instrumental in the success or failure of the plan. The public will be invited to participate in annual open forum meetings and will be notified through legal newspaper notices, mailings, and personal invitations by phone or email. The public input will be reviewed and, where appropriate, incorporated into the Hazard Mitigation Plan, consistent with the update schedule.

This Plan was developed under the direction of the GCHMPT with the support of their consultant, Hazard Mitigation Specialists, LLC. The draft plan was reviewed by the GCHMPT and made available for public comment both during and after the draft plan development process.

The personnel responsible for monitoring the implementation and evaluation of the necessity for updating the plan is the Garfield County Emergency Management Director. The Emergency Management Director reports directly to the Garfield County commissioners.

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# GARFIELD COUNTY, OKLAHOMA



## APPENDICES

# **APPENDICES**

## **Appendix A – Plan Organization**

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- Mailing List
- Public Notices
- Letters of Invitation
- Agendas

## **Appendix B – Meeting minutes**

- February 16, 2012
- April 27, 2012
- June 8, 2012
- July 15, 2012 – County Fire Chiefs
- July 16, 2012
- September 12, 2012
- September 20, 2012 – County School Superintendents
- October 16, 2012 – Citizen Review Meeting
- September 11, 2013

## **Appendix C – Maps**

- Garfield County Boundaries
- Garfield County School Districts
- Garfield County Fire Departments
- FIRM maps

## **Appendix D – State All Hazard Mutual Aid Agreement**

## **Appendix E – Critical Facilities**

## Appendix A- Plan Organization

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- **Mailing List** – (notices were made by e-mail rather than by mail outs.

Bill Presley; [merc@suddenlinkmail.com](mailto:merc@suddenlinkmail.com) - RMRS/MERC Coordinator  
Carolyn Bowling; [carolynbowling@yahoo.com](mailto:carolynbowling@yahoo.com) - Member – Douglas Town Council  
Corban Baker; [cbaker@enid.org](mailto:cbaker@enid.org) – Training Officer – Enid Fire Department  
Carissa Cowen; [clcowen@nwsu.edu](mailto:clcowen@nwsu.edu) – Northwestern State University - Enid  
Darren Sharp; [dsharp@c-d.k12.ok.us](mailto:dsharp@c-d.k12.ok.us) – Superintendent – Covington-Douglas Schools  
David Burford; [burfordave@pdi.net](mailto:burfordave@pdi.net) – Mayor – Town of Drummond  
Garfield County Commissioners; [garfieldcountycommissioners@hotmail.com](mailto:garfieldcountycommissioners@hotmail.com)  
    Marc Bolz – District 1  
    Mike Postier – District 2  
    James Simunek – District 3  
Gary Naugle; [lahoma.oem@gmail.com](mailto:lahoma.oem@gmail.com) – Emergency Manager – Town of Lahoma  
Jackie Wright; [jackie.wright@oem.ok.gov](mailto:jackie.wright@oem.ok.gov) – Area Coordinator – Oklahoma Emergency Management  
John Hestand; [%22John%20Hestand%22@msg.onenet.net](mailto:%22John%20Hestand%22@msg.onenet.net) – Emergency Coordinator - Saint Mary's Hospital  
Kathy Hughes; [khughes@garfieldcountymail.com](mailto:khughes@garfieldcountymail.com) – Garfield County Clerk  
Kevin Hassler; [enidnews@enidnews.com](mailto:enidnews@enidnews.com) – Associate Editor - Enid News and Eagle  
Kevin Morris; [kmorris@enid.org](mailto:kmorris@enid.org) – Assistant EM Director – City of Enid  
Marc Bolz; [marcbolz@hotmail.com](mailto:marcbolz@hotmail.com) – County Commissioner District 1  
Mike Woods; [mwoods@drummond.k12.ok.us](mailto:mwoods@drummond.k12.ok.us) – Superintendent – Drummond Schools  
Ral Skrapke; [rskrapke@autrytech.edu](mailto:rskrapke@autrytech.edu) - Autry Technology Center IT  
Mary Jac Rauh; [MaryJR@health.ok.gov](mailto:MaryJR@health.ok.gov) – Emergency Response Coordinator – Garfield County Health Dept.  
Raydon Tilley; [rtilley@chisholm.k12.ok.us](mailto:rtilley@chisholm.k12.ok.us) – Superintendent – Chisholm Public Schools  
Shawn Hime; [sdhime@enidk12.org](mailto:sdhime@enidk12.org); - Superintendent, Enid Public Schools  
Brian Wilson; [Brian.Wilson@uhsinc.com](mailto:Brian.Wilson@uhsinc.com) – HR Dept. St Mary's Hospital  
Russell A Wilson; [WilsR1@Integris-Health.com](mailto:WilsR1@Integris-Health.com) – Integris Health Maintenance – Emergency Coordinator  
Bobby Tennell; [btenn1@hotmail.com](mailto:btenn1@hotmail.com) – Fire Chief/ EM Team Leader – Hillsdale/Carrier FD/Hillsdale Christian School  
Brian Corderman; [brian.corderman@triangleins.com](mailto:brian.corderman@triangleins.com) – Fire Chief – Town of Drummond  
Clarence Maly; [clmaly@sbcglobal.net](mailto:clmaly@sbcglobal.net) – Fire Chief – Town of Waukomis  
Cody Hawk; [lahomafd@pdi.net](mailto:lahomafd@pdi.net) - Fire Chief – Town of Lahoma  
Cory Rink; [covingtonfire\\_rescue@hotmail.com](mailto:covingtonfire_rescue@hotmail.com) - Fire Chief – Town of Covington  
Curtis Toews; [cstfarms@pdi.net](mailto:cstfarms@pdi.net) – Assistant Fire Chief – Town of Hunter  
Derrick Harris; [kremlinfire@sbcglobal.net](mailto:kremlinfire@sbcglobal.net) – Fire Chief – Town of Kremlin  
Dustin Kingcade; [d\\_kingcade@yahoo.com](mailto:d_kingcade@yahoo.com) – Fire Chief – Town of Douglas  
Eric McVey; [eric.mcvey@behlenmfg.com](mailto:eric.mcvey@behlenmfg.com) – Fire Chief - Pioneer  
Hank Deeds; [ib4osu@hotmail.com](mailto:ib4osu@hotmail.com) – Fire Chief – Town of Garber  
Bobby Tennell; [hcfire@sbcglobal.net](mailto:hcfire@sbcglobal.net) – Fire Chief – Hillsdale Fire Department  
Joel Eggers; [fairmontfirehouse@att.net](mailto:fairmontfirehouse@att.net) - Fire Chief – Town of Fairmont  
Mindy Deeds; [mindydeeds@hotmail.com](mailto:mindydeeds@hotmail.com) – firefighter – town of Garber  
Rick Oller; [metcoprovers@yahoo.com](mailto:metcoprovers@yahoo.com) – Fire Chief Breckinridge  
Ricky Roggow; [rroggow2000@yahoo.com](mailto:rroggow2000@yahoo.com) – Assistant Fire Chief – Town of Breckinridge  
Rusty Carter; [hunterfiredept@pdi.net](mailto:hunterfiredept@pdi.net) – Fire Chief – Town of Hunter  
Steve Walker. [supt@cimarron.k12.ok.us](mailto:supt@cimarron.k12.ok.us) – Superintendent - Cimarron Public Schools  
Brent Koontz; [www.ppv.k12.ok.us](http://www.ppv.k12.ok.us) - Superintendent – Pioneer-Pleasant Vale Schools

| DATE       | NAME             | JURISDICTION                        | POSITION                | CONTRIBUTIONS                                                                                                                                                                                                          |
|------------|------------------|-------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9/12/2012  | Aaron Moore      | Garber Fire Department              | Chief                   | ◇ Discussed additional projects for each potential hazard and additional information for those already selected.                                                                                                       |
| 4/27/2012  | Amber Fitzgerald | Enid Public Schools                 | Communications Director | ◇ Discussed the requirements for identifying a critical facility and why they are important.                                                                                                                           |
| 12/12/2011 | Bill Presley     | MERC, Region I                      | Coordinator             | ◇ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                                                                                                                          |
| 6/8/2012   | Bill Presley     | MERC, Region I                      | Coordinator             | ◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.                                                    |
| 10/16/2012 | Bill Presley     | MERC, Region I                      | Coordinator             | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                                                                         |
| 10/16/2012 | Bobby Terrell    | Hillsdale / Carrier Fire Department | Chief / EM Team Leader  | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.<br>◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/20/2012  | Brent Koontz     | Pioneer - Pleasant Vale             | Superintendent          | ◇ Reviewed the discussion of the general purpose of the HM Plan.                                                                                                                                                       |



| DATE       | NAME            | JURISDICTION              | POSITION               | CONTRIBUTIONS                                                                                                                                                                                                |
|------------|-----------------|---------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7/15/2012  | Brian Robinette | Waukomis Fire Department  | Fire Fighter           | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                                                                        |
| 2/16/2012  | Brian Wilson    | St. Mary's Medical Center | HR Mgr; EM Coordinator | ◊ Discussed the general purpose of the HM Plan<br>◊ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County |
| 4/27/2012  | Carrie K Carter | MERC, Region I            | MERC Assistant         | ◊ Discussed the requirements for identifying a critical facility and why they are important.<br>◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.               |
| 10/16/2012 | Charles Baldwin | Kingfisher Hospital       | Respiratory Therapist  | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                                                               |
| 7/15/2012  | Clarence Maly   | Waukomis Fire Department  | Fire Chief             | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                                                                        |
| 9/12/2012  | Connie K Condon | MERC, Region I            | Assistant              | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.                                                                                             |

| DATE       | NAME         | JURISDICTION           | POSITION         | CONTRIBUTIONS                                                                                                                                                                                                                                                        |
|------------|--------------|------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2/16/2012  | Corbin Baker | Enid Fire Department   | Training Officer | <ul style="list-style-type: none"> <li>◇ Discussed the general purpose of the HM Plan</li> <li>◇ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County</li> </ul> |
| 6/8/2012   | Corbin Baker | Enid Fire Department   | Training Officer | <ul style="list-style-type: none"> <li>◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.</li> </ul>                                                |
| 7/16/2012  | Corbin Baker | Enid Fire Department   | Training Officer | <ul style="list-style-type: none"> <li>◇ Discussed the possibilities of additional projects for each potential hazard.</li> </ul>                                                                                                                                    |
| 10/16/2012 | Corbin Baker | Enid Fire Department   | Training Officer | <ul style="list-style-type: none"> <li>◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.</li> </ul>                                                                                                                     |
| 7/15/2012  | Curtis Toews | Hunter Fire Department | Assistant Chief  | <ul style="list-style-type: none"> <li>◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.</li> </ul>                                                                              |
| 9/11/2013  | Dale Bledsoe | Waukomis Public School | Superintendent   | <ul style="list-style-type: none"> <li>◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.</li> </ul>                                                                                               |
| 10/16/2012 | Damond Burpo | World Harvest Church   | Pastor           | <ul style="list-style-type: none"> <li>◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.</li> </ul>                                                                                                                     |

| DATE      | NAME           | JURISDICTION                     | POSITION       | CONTRIBUTIONS                                                                                                                                                                                                                                                        |
|-----------|----------------|----------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2/16/2012 | Darren Sharp   | Covington Douglas Public Schools | Superintendent | <ul style="list-style-type: none"> <li>◇ Discussed the general purpose of the HM Plan</li> <li>◇ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County</li> </ul> |
| 4/27/2012 | Darren Sharp   | Covington Douglas Public Schools | Superintendent | <ul style="list-style-type: none"> <li>◇ Discussed the requirements for identifying a critical facility and why they are important.</li> </ul>                                                                                                                       |
| 7/16/2012 | Darren Sharp   | Covington Douglas Public Schools | Superintendent | <ul style="list-style-type: none"> <li>◇ Discussed the possibilities of additional projects for each potential hazard.</li> </ul>                                                                                                                                    |
| 9/12/2012 | Darren Sharp   | Covington Douglas Public Schools | Superintendent | <ul style="list-style-type: none"> <li>◇ Discussed additional projects for each potential hazard and additional information for those already selected.</li> </ul>                                                                                                   |
| 9/20/2012 | Darren Sharp   | Covington Douglas Public Schools | Superintendent | <ul style="list-style-type: none"> <li>◇ Reviewed the discussion of the general purpose of the HM Plan.</li> </ul>                                                                                                                                                   |
| 7/15/2012 | Darryl Deeds   | Garber Fire Department           | Fire Chief     | <ul style="list-style-type: none"> <li>◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.</li> </ul>                                                                              |
| 9/11/2013 | Darwin Proctor | NWOSU                            | Campus Police  | <ul style="list-style-type: none"> <li>◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.</li> </ul>                                                                                               |

| DATE       | NAME              | JURISDICTION     | POSITION | CONTRIBUTIONS                                                                                                                                                                                                |
|------------|-------------------|------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4/27/2012  | David O Barford   | Town of Drummond | Mayor    | ◇ Discussed the requirements for identifying a critical facility and why they are important.                                                                                                                 |
| 6/8/2012   | David O Barford   | Town of Drummond | Mayor    | ◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.                                          |
| 7/16/2012  | David O Barford   | Town of Drummond | Mayor    | ◇ Discussed the possibilities of additional projects for each potential hazard.                                                                                                                              |
| 9/12/2012  | David O Barford   | Town of Drummond | Mayor    | ◇ Discussed additional projects for each potential hazard and additional information for those already selected.                                                                                             |
| 12/12/2011 | David VanNostrand | HMS              | Planner  | ◇ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                                                                                                                |
| 2/16/2012  | David VanNostrand | HMS              | Planner  | ◇ Discussed the general purpose of the HM Plan<br>◇ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County |
| 4/27/2012  | David VanNostrand | HMS              | Planner  | ◇ Discussed the requirements for identifying a critical facility and why they are important.                                                                                                                 |

| DATE       | NAME               | JURISDICTION   | POSITION                    | CONTRIBUTIONS                                                                                                                                                       |
|------------|--------------------|----------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6/8/2012   | David Van Nostrand | HMS            | Planner                     | ◊ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated. |
| 7/15/2012  | David VanNostrand  | HMS            | Planner                     | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                               |
| 7/16/2012  | David VanNostrand  | HMS            | Planner                     | ◊ Discussed the possibilities of additional projects for each potential hazard.                                                                                     |
| 9/12/2012  | David VanNostrand  | HMS            | Planner                     | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.                                                    |
| 9/20/2012  | David VanNostrand  | HMS            | Planner                     | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                                                                    |
| 10/16/2012 | David VanNostrand  | HMS            | Planner                     | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                      |
| 10/16/2012 | Dianne Phillips    | Alfalfa County | Emergency Manager           | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                      |
| 9/11/2013  | Don McFadden       | Koch Nitrogen  | Business Improvement Leader | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                |
| 9/20/2012  | Dub Bledsoe        | Waukomis PS    | Superintendent              | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                                                                    |



| DATE       | NAME            | JURISDICTION                | POSITION          | CONTRIBUTIONS                                                                                                                                                       |
|------------|-----------------|-----------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7/15/2012  | Dustin Kingcade | Douglas Fire Department     | Fire Chief        | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                               |
| 10/16/2012 | Eddy England    | Life EMS                    | EVO               | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                      |
| 10/16/2012 | Emily Burton    | Garfield County District #2 | LEPC              | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                      |
| 7/15/2012  | Eric McVey      | Pioneer                     | Chief             | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                               |
| 10/16/2012 | Esther Fischer  | APS - DHS                   | Supervisor        | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                      |
| 4/27/2012  | Gary Naugle, Jr | Town of Lahoma              | Emergency Manager | ◊ Discussed the requirements for identifying a critical facility and why they are important.                                                                        |
| 6/8/2012   | Gary Naugle, Jr | Town of Lahoma              | Emergency Manager | ◊ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated. |

| DATE       | NAME           | JURISDICTION                       | POSITION             | CONTRIBUTIONS                                                                                                                               |
|------------|----------------|------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 9/11/2013  | Glen Haworth   | GEFCO, INC /<br>New Hope<br>UMC    | Emergency<br>Manager | ◇ Responded to the form for Capability Assessment<br>evaluation and discussed the various topics contained<br>in the form.                  |
| 10/16/2012 | Greg Icke      | Life EMS                           | Paramedic            | ◇ Discussed the purpose of the Hazard Mitigation Plan<br>to neighboring jurisdictions / counties.                                           |
| 12/12/2011 | James Simunek  | Garfield<br>County, District<br>#3 | Commissoner          | ◇ Discussed the objectives of having an HM Plan and<br>the projected schedule for accomplishment                                            |
| 9/11/2013  | Jason Toews    | Chisholm<br>School                 | Plant Manager        | ◇ Responded to the form for Capability Assessment<br>evaluation and discussed the various topics contained<br>in the form.                  |
| 10/16/2012 | Jay Sharp      | Red Cross                          | Disaster<br>Services | ◇ Discussed the purpose of the Hazard Mitigation Plan<br>to neighboring jurisdictions / counties.                                           |
| 7/15/2012  | Jeff Boedaker  | Drummond Fire<br>Department        | Captain              | ◇ Reviewed the work that has already been done by the<br>GCHMPT. Discussed the importance of Fire<br>Department involvement in the process. |
| 7/15/2012  | Jeremy Messall | Drummond Fire<br>Department        | Assistant Chief      | ◇ Reviewed the work that has already been done by the<br>GCHMPT. Discussed the importance of Fire<br>Department involvement in the process. |

| DATE       | NAME         | JURISDICTION                     | POSITION          | CONTRIBUTIONS                                                                                                        |
|------------|--------------|----------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------|
| 9/11/2013  | Jerry Brown  | LEPC                             | N/A               | ◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/12/2012  | Jerry Carson | Garber City Council              | Council Member    | ◇ Discussed additional projects for each potential hazard and additional information for those already selected.     |
| 9/11/2013  | Jerry Niles  | Garfield County Sheriff's Office | Sheriff           | ◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 10/16/2012 | Jess Andrews | LEPC                             | N/A               | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                       |
| 9/11/2013  | Jess Andrews | GCEM                             | Haz Mat Tech      | ◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/20/2012  | Jim Lamar    | Garber Public Schools            | Superintendent    | ◇ Reviewed the discussion of the general purpose of the HM Plan.                                                     |
| 9/20/2012  | Jim Patton   | Kremlin-Hilldale PS              | Superintendent    | ◇ Reviewed the discussion of the general purpose of the HM Plan.                                                     |
| 9/20/2012  | Jim S Thate  | Autry Tech Center                | Duty Supt         | ◇ Reviewed the discussion of the general purpose of the HM Plan.                                                     |
| 9/12/2012  | Jim Strecker | Autry Tech                       | CEO               | ◇ Discussed additional projects for each potential hazard and additional information for those already selected.     |
| 10/16/2012 | Jo Bradshaw  | Vance AFB                        | Emergency Manager | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                       |

| DATE       | NAME            | JURISDICTION              | POSITION            | CONTRIBUTIONS                                                                                                                                                                                                |
|------------|-----------------|---------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6/8/2012   | Joel Eggers     | Fairmont Fire Department  | EM Chief            | ◊ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.                                          |
| 9/20/2012  | Joel Quinn      | Pond Creek - Hunter       | Superintendent      | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                                                                                                             |
| 2/16/2012  | John Hammond    | St. Mary's Medical Center | Facilities Director | ◊ Discussed the general purpose of the HM Plan<br>◊ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County |
| 7/16/2012  | John Hammond    | St Mary's Medical Center  | Facilities Director | ◊ Discussed the possibilities of additional projects for each potential hazard.                                                                                                                              |
| 4/27/2012  | Joshua Stephens | Autry Tech                | Not Listed          | ◊ Discussed the requirements for identifying a critical facility and why they are important.                                                                                                                 |
| 9/11/2013  | Juanita Gates   | City of Enid              | Permit Tech         | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                                                         |
| 12/12/2011 | Judy K. Soos    | HMS                       | Planner             | ◊ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                                                                                                                |

| DATE       | NAME         | JURISDICTION             | POSITION                   | CONTRIBUTIONS                                                                                                    |
|------------|--------------|--------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------|
| 4/27/2012  | Judy K. Soos | HMS                      | Planner                    | ◇ Discussed the requirements for identifying a critical facility and why they are important.                     |
| 7/16/2012  | Judy K. Soos | HMS                      | Planner                    | ◇ Discussed the possibilities of additional projects for each potential hazard.                                  |
| 9/12/2012  | Judy K. Soos | HMS                      | Planner                    | ◇ Discussed additional projects for each potential hazard and additional information for those already selected. |
| 10/16/2012 | Julie Snow   | Meadows Point Apartments | Service Coordinator        | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                   |
| 4/27/2012  | Justin Mc    | Enid Fire Department     | Assistant Training Officer | ◇ Discussed the requirements for identifying a critical facility and why they are important.                     |
| 10/16/2012 | K J Pfaff    | Enid                     | Not Listed                 | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                   |
| 12/12/2011 | Kathy Hughes | Garfield County          | County Clerk               | ◇ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                    |
| 4/27/2012  | Kathy Hughes | Garfield County          | County Clerk               | ◇ Discussed the requirements for identifying a critical facility and why they are important.                     |
| 7/16/2012  | Kathy Hughes | Garfield County          | County Clerk               | ◇ Discussed the possibilities of additional projects for each potential hazard.                                  |



| DATE       | NAME               | JURISDICTION                                | POSITION               | CONTRIBUTIONS                                                                                                                                                       |
|------------|--------------------|---------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7/15/2012  | Keith Dillingham   | Drummond Fire Department                    | Lieutenant             | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                               |
| 6/8/2012   | Kevin Morris       | Enid Emergency Mgmt; Enid Police Department | Assistant Director     | ◊ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated. |
| 9/12/2012  | Kevin Morris       | Enid Emergency Mgmt; Enid Police Department | Assistant Director     | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.                                                    |
| 7/15/2012  | Kody Mcvey         | Pioneer Fire Dept                           | Not Listed             | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                               |
| 10/16/2012 | Larry Jantzen      | Larry's Home Oxygen                         | Owner - Health Service | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                      |
| 9/11/2013  | Lloyd Cross        | Town of Lahoma                              | Police Chief           | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                |
| 9/12/2012  | Lynda Van Nostrand | McIntosh County                             | Community Citizen      | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.                                                    |

| DATE       | NAME         | JURISDICTION                                     | POSITION                 | CONTRIBUTIONS                                                                                                                                                       |
|------------|--------------|--------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12/12/2011 | Marc Bolz    | Garfield County, District #1 / Town of Covington | Commissioner             | ◇ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                                                                       |
| 4/27/2012  | Marc Bolz    | Garfield County, District #1 / Town of Covington | Commissioner             | ◇ Discussed the requirements for identifying a critical facility and why they are important.                                                                        |
| 6/8/2012   | Marc Bolz    | Garfield County, District #1 / Town of Covington | Commissioner             | ◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated. |
| 7/16/2012  | Marc Bolz    | Garfield County, District #1 / Town of Covington | Commissioner             | ◇ Discussed the possibilities of additional projects for each potential hazard.                                                                                     |
| 9/20/2012  | Marcie Mack  | Autry Tech                                       | Assistant Superintendent | ◇ Reviewed the discussion of the general purpose of the HM Plan.                                                                                                    |
| 4/27/2012  | Mark Morton  | Vance AFB Fire Department                        | Chief                    | ◇ Discussed the requirements for identifying a critical facility and why they are important.                                                                        |
| 6/8/2012   | Mary Jo Rauh | Garfield County Health Department                | Emergency Manager        | ◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated. |
| 9/12/2012  | Mary Jo Rauh | Garfield County Health Department                | Emergency Manager        | ◇ Discussed additional projects for each potential hazard and additional information for those already selected.                                                    |

| DATE       | NAME             | JURISDICTION               | POSITION                 | CONTRIBUTIONS                                                                                                                         |
|------------|------------------|----------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 7/15/2012  | Mason Hornberger | Waukomis Fire Department   | EMT / FF                 | ◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process. |
| 7/15/2012  | Michael DeRemer  | HMS                        | Mitigation Specialist    | ◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process. |
| 7/16/2012  | Michael DeRemer  | HMS                        | Mitigation Specialist    | ◇ Discussed the possibilities of additional projects for each potential hazard.                                                       |
| 9/12/2012  | Michael DeRemer  | HMS                        | Mitigation Specialist    | ◇ Discussed additional projects for each potential hazard and additional information for those already selected.                      |
| 9/20/2012  | Michael DeRemer  | HMS                        | Mitigation Specialist    | ◇ Reviewed the discussion of the general purpose of the HM Plan.                                                                      |
| 9/11/2013  | Michael DeRemer  | HMS                        | Mitigation Specialist    | ◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                  |
| 9/11/2013  | Michael Hammons  | Koch Nitrogen              | Environmental Technician | ◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                  |
| 12/12/2011 | Mike Honigsberg  | Garfield County North Enid | Emergency Manager        | ◇ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                                         |

| DATE      | NAME            | JURISDICTION                  | POSITION             | CONTRIBUTIONS                                                                                                                                                                                                                                                        |
|-----------|-----------------|-------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2/16/2012 | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Discussed the general purpose of the HM Plan</li> <li>◇ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County</li> </ul> |
| 4/27/2012 | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Discussed the requirements for identifying a critical facility and why they are important.</li> </ul>                                                                                                                       |
| 6/8/2012  | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.</li> </ul>                                                |
| 7/15/2012 | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.</li> </ul>                                                                              |
| 7/16/2012 | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Discussed the possibilities of additional projects for each potential hazard.</li> </ul>                                                                                                                                    |
| 9/12/2012 | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Discussed additional projects for each potential hazard and additional information for those already selected.</li> </ul>                                                                                                   |
| 9/20/2012 | Mike Honigsberg | Garfield County<br>North Enid | Emergency<br>Manager | <ul style="list-style-type: none"> <li>◇ Reviewed the discussion of the general purpose of the HM Plan.</li> </ul>                                                                                                                                                   |

| DATE       | NAME            | JURISDICTION                       | POSITION             | CONTRIBUTIONS                                                                                                                                                                                                |
|------------|-----------------|------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10/16/2012 | Mike Honigsberg | Garfield County<br>North Enid      | Emergency<br>Manager | ◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                                                               |
| 9/11/2013  | Mike Honigsberg | Garfield County<br>North Enid      | Emergency<br>Manager | ◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                                                         |
| 12/12/2011 | Mike Postier    | Garfield<br>County, District<br>#2 | Commissoner          | ◇ Discussed the objectives of having an HM Plan and the projected schedule for accomplishment                                                                                                                |
| 2/16/2012  | Mike Woods      | Drummond<br>Schools                | Superintendent       | ◇ Discussed the general purpose of the HM Plan<br>◇ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County |
| 4/27/2012  | Mike Woods      | Drummond<br>Schools                | Superintendent       | ◇ Discussed the requirements for identifying a critical facility and why they are important.                                                                                                                 |
| 6/8/2012   | Mike Woods      | Drummond<br>Schools                | Superintendent       | ◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.                                          |
| 7/16/2012  | Mike Woods      | Drummond<br>Schools                | Superintendent       | ◇ Discussed the possibilities of additional projects for each potential hazard.                                                                                                                              |



| DATE      | NAME              | JURISDICTION                     | POSITION       | CONTRIBUTIONS                                                                                                                                                                                                |
|-----------|-------------------|----------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9/11/2013 | Mike Woods        | Drummond Schools                 | Superintendent | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                                                         |
| 9/11/2013 | Pamela Ballard    | United Wau of Enid & NW Oklahoma | Exec Director  | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                                                         |
| 9/12/2012 | Patricia Berry    | Garber City Council              | Council Member | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.                                                                                             |
| 7/15/2012 | Ray E Combran     | Kremlin Fire Department          | Fire Fighter   | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                                                                        |
| 2/16/2012 | Raydon Tilley     | Chisholm School                  | Superintendent | ◊ Discussed the general purpose of the HM Plan<br>◊ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County |
| 9/20/2012 | Raydon Tilley     | Chisholm School                  | Superintendent | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                                                                                                             |
| 6/8/2012  | Raylene Somerlott | Canadian County                  | Citizen        | ◊ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.                                          |

| DATE       | NAME            | JURISDICTION             | POSITION              | CONTRIBUTIONS                                                                                                                                                                                                                                                        |
|------------|-----------------|--------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2/16/2012  | Rick Skrapke    | Autry Tech               | IT Dept               | <ul style="list-style-type: none"> <li>◇ Discussed the general purpose of the HM Plan</li> <li>◇ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County</li> </ul> |
| 6/8/2012   | Rick Skrapke    | Autry Tech               | IT Dept               | <ul style="list-style-type: none"> <li>◇ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.</li> </ul>                                                |
| 7/15/2012  | Ricky Roggow    | Breckinridge FD          | Assistant Chief / EMT | <ul style="list-style-type: none"> <li>◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.</li> </ul>                                                                              |
| 7/15/2012  | Robert Springer | Waukomis Fire Department | Fire Fighter          | <ul style="list-style-type: none"> <li>◇ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.</li> </ul>                                                                              |
| 10/16/2012 | Robin Perry     | St Mary's Medical Center | Emergency Manager     | <ul style="list-style-type: none"> <li>◇ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.</li> </ul>                                                                                                                     |
| 9/11/2013  | Robin Pokorny   | Red Cross                | Exec Director         | <ul style="list-style-type: none"> <li>◇ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.</li> </ul>                                                                                               |

| DATE       | NAME            | JURISDICTION             | POSITION          | CONTRIBUTIONS                                                                                                                         |
|------------|-----------------|--------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 9/11/2013  | Roger Dille     | Bass Hospital            | Safety Leader     | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                  |
| 7/15/2012  | Rusty Carter    | Hunter Fire Department   | Chief             | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process. |
| 7/15/2012  | Ryan Singleton  | Grady County 9-1-1       | Lieutenant        | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process. |
| 9/12/2012  | Samuel Strecker | Garber                   | Emergency Manager | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.                      |
| 10/16/2012 | Sandy Howard    | Our Daily Bread          | Director          | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                        |
| 9/11/2013  | Scott Hoover    | Vance AFB                | Emergency Manager | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                  |
| 9/20/2012  | Shawn Hime      | Enid Schools             | Superintendent    | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                                      |
| 10/16/2012 | Sheri O'Brien   | St Mary's Medical Center | JCP Manager       | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                        |

| DATE       | NAME            | JURISDICTION | POSITION          | CONTRIBUTIONS                                                                                                                                                                                                |
|------------|-----------------|--------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9/11/2013  | Stacie Leaton   | Enid SPCA    | Board Member      | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form.                                                                                         |
| 10/16/2012 | Stephen Foster  | Woods County | Emergency Manager | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                                                                                                               |
| 2/16/2012  | Steve Somerlott | HMS          | Planner           | ◊ Discussed the general purpose of the HM Plan<br>◊ Reviewed the fourteen hazards that occur in the state of Oklahoma and helped identify ten potential hazards that have either occurred in Garfield County |
| 4/27/2012  | Steve Somerlott | HMS          | Planner           | ◊ Discussed the requirements for identifying a critical facility and why they are important.                                                                                                                 |
| 6/8/2012   | Steve Somerlott | HMS          | Planner           | ◊ Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated.                                          |
| 7/15/2012  | Steve Somerlott | HMS          | Planner           | ◊ Reviewed the work that has already been done by the GCHMPT. Discussed the importance of Fire Department involvement in the process.                                                                        |
| 7/16/2012  | Steve Somerlott | HMS          | Planner           | ◊ Discussed the possibilities of additional projects for each potential hazard.                                                                                                                              |

| DATE       | NAME             | JURISDICTION     | POSITION          | CONTRIBUTIONS                                                                                                        |
|------------|------------------|------------------|-------------------|----------------------------------------------------------------------------------------------------------------------|
| 9/12/2012  | Steve Somerlott  | HMS              | Planner           | ◊ Discussed additional projects for each potential hazard and additional information for those already selected.     |
| 9/20/2012  | Steve Somerlott  | HMS              | Planner           | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                     |
| 10/16/2012 | Steve Somerlott  | HMS              | Planner           | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                       |
| 9/11/2013  | Steve Somerlott  | HMS              | Planner           | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/20/2012  | Steve Walker     | Cimarron Schools | Superintendent    | ◊ Reviewed the discussion of the general purpose of the HM Plan.                                                     |
| 10/16/2012 | Tamara Fischer   | Okeene Hospital  | CNO               | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                       |
| 10/16/2012 | Tom Shearer      | Vance AFB        | Emergency Manager | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                       |
| 9/11/2013  | Travis DePrinzio | Vance AFB        | Emergency Manager | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 10/16/2012 | Tresa Lackey     | Major County     | Emergency Manager | ◊ Discussed the purpose of the Hazard Mitigation Plan to neighboring jurisdictions / counties.                       |

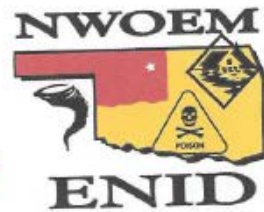


| DATE      | NAME           | JURISDICTION  | POSITION            | CONTRIBUTIONS                                                                                                        |
|-----------|----------------|---------------|---------------------|----------------------------------------------------------------------------------------------------------------------|
| 9/11/2013 | Troy Cowley    | O G & E       | Community Relations | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/11/2013 | Vickie Grantz  | Enid SPCA     | Exec Director       | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/11/2013 | Wayne A Ross   | Koch Nitrogen | Safety Leader       | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |
| 9/11/2013 | Wayne McMillan | NWOSU         | Dean                | ◊ Responded to the form for Capability Assessment evaluation and discussed the various topics contained in the form. |

- Public Notices



**OFFICE OF  
EMERGENCY  
MANAGEMENT**



## **PUBLIC NOTICE**

**HAZARD MITIGATION MEETING**

**FRIDAY, APRIL 27<sup>TH</sup> FROM 2PM TO 4 PM.**

**LOCATION: AUTRY TECHNOLOGY CENTER  
1201 WEST WILLOW**

**LOCATION WITHIN THE BUILDING:  
LECTORIUM, ROOM 22**

FILED  
GARFIELD COUNTY  
OKLAHOMA  
2012 APR 23 P 2:21  
KATHY R. HUGHES  
COUNTY CLERK  
BY *Kathy Hughes* Deputy

- Letters of Invitation

**From:** [Mike Honigsberg](#)

**Date:** 4/3/2012 11:20:21 AM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); ["John Hestand"@msg.onenet.net](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [R. Skrapke](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Brian](#); [Wilson, Russell A](#); ['BOBBY TENNELL'](#); [Brian Corderman](#); ['Clarence Maly'](#); [cody hawk](#); ['Cory Rink'](#); [Curtis Toews](#); ['Derrick Harris'](#); ['DUSTIN KINGCADE'](#); ['Eric McVey'](#); [HANK DEEDS](#); ['Hillsdale Fire Dept'](#); ['Joel Eggers'](#); ['Joel Eggers'](#); [Mindy Deeds](#); ['Rick Oller'](#); ['Ricky Roggow'](#); ['Rusty Carter'](#)

**Subject:** Hazard Mitigation Meeting



**OFFICE OF  
EMERGENCY  
MANAGEMENT**



**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

Good morning,

Some of you that are receiving this email may not be aware that we are creating a new Hazard Mitigation Plan for Garfield County. Some on this list were in attendance last month and we had to cancel this month's meeting. We were going to meet tomorrow April 4<sup>th</sup> at 1:30 pm at Autry Tech. That meeting again, is cancelled. I will **email a date** to all of you when we will meet in May. I know this isn't the best month to meet but we'll try to do it in early May. The next paragraph is a letter that we were going to send out to everyone on the mailing list to explain the importance of participating in this plan. I need email addresses of all school superintendents, principles and I am working on getting the email address of all city and town officials. If you can help me out along these lines, it would be appreciated. Here is the letter and I will get back with you all in a day or so with the next scheduled meeting.



**OFFICE OF  
EMERGENCY  
MANAGEMENT**



**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

To whom it may concern,

Last month we had our start-up meeting for the Garfield County Hazard Mitigation Plan. We had several school officials there and a few government personnel, but NO city/town jurisdictions. I know we are all busy but this Hazard Mitigation Plan that we are working on will affect you. NON-participation will only void your ability to apply for much needed funding for projects using mitigation funds from declared disasters within the State of Oklahoma.

This is extremely important. We are required to have this plan by the government. In the near future, your school or jurisdiction may be required to be a part of a Hazard Mitigation Plan in order to receive disaster funds from FEMA. There is a lot of talk concerning this, at this time.

This planning process only asks that you attend 5 to 8 meetings a year and these meetings will only take an hour or so. It may even be 3 to 6 meetings. It just depends on us. We are trying to have these meetings during the day so your personal time isn't affected. Please make every effort to attend these very important meetings.

Thank you

As stated above, I will email information to all from now on. Thank you for your time.

Mike

Mike Honigsberg, Certified Director  
Enid/Garfield County Emergency Management  
Chairman, Tri-County Emergency Services  
E.O.C. 580-249-5969  
Personal Cell--580-541-1263  
Blackberry- [mhonigsberg@pioneer.blackberry.com](mailto:mhonigsberg@pioneer.blackberry.com)  
Twitter- @garfieldem  
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Web Site-- [www.enid.org](http://www.enid.org)

**HOW "YOU" COPE WITH THE REALITY OF DISASTER DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**



**From:** [Mike Honigsberg](#)

**Date:** 4/5/2012 10:36:54 AM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); ["John Hestand"@msg.onenet.net](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Brian](#); [Wilson, Russell A](#); ['BOBBY TENNELL'](#); [Brian Corderman](#); ['Clarence Maly'](#); [cody hawk](#); ['Cory Rink'](#); [Curtis Toews](#); ['Derrick Harris'](#); ['DUSTIN KINGCADE'](#); ['Eric McVey'](#); [HANK DEEDS](#); ['Hillsdale Fire Dept'](#); ['Joel Eggers'](#); ['Joel Eggers'](#); [Mindy Deeds](#); ['Rick Oller'](#); ['Ricky Roggow'](#); ['Rusty Carter'](#)

**Subject:** Rescheduled Haz-Mit meeting



**OFFICE OF  
EMERGENCY  
MANAGEMENT**



Good morning,

Please mark your calendars for April 27<sup>th</sup> at 2 pm for the next Hazard Mitigation Meeting. It will be held at Autry Tech in the Lectorium, Room 22. I again apologize for cancelling the meeting this week but we'll be able to pick up and move forward on the 27<sup>th</sup>. This is extremely important for all schools and jurisdictions to be a part of this program. Grant money is at stake from our State Hazard Mitigation Fund.

See you all there.

Mike

Mike Honigsberg, Certified Director  
Enid/Garfield County Emergency Management  
Chairman, Tri-County Emergency Services  
E.O.C. 580-249-5969  
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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**

**From:** [Mike Honigsberg](#)

**Date:** 4/23/2012 11:02:06 AM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); ["John Hestand"@msg.onenet.net](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Brian](#); [Wilson, Russell A](#); ['BOBBY TENNELL'](#); [Brian Corderman](#); ['Clarence Maly'](#); [cody hawk](#); ['Cory Rink'](#); [Curtis Toews](#); ['Derrick Harris'](#); ['DUSTIN KINGCADE'](#); ['Eric McVey'](#); [HANK DEEDS](#); ['Hillsdale Fire Dept'](#); ['Joel Eggers'](#); ['Joel Eggers'](#); [Mindy Deeds](#); ['Rick Oller'](#); ['Ricky Roggow'](#); ['Rusty Carter'](#)

**Subject:** Hazard Mitigation Meeting

Looking forward to seeing you all at the meeting this Friday.

**From:** [Mike Honigsberg](#)

**Date:** 6/4/2012 8:56:57 AM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); [John Hestand](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Brian](#); [Wilson, Russell A](#); ['BOBBY TENNELL'](#); [Brian Corderman](#); ['Clarence Maly'](#); [cody hawk](#); ['Cory Rink'](#); [Curtis Toews](#); ['Derrick Harris'](#); ['DUSTIN KINGCADE'](#); ['Eric McVey'](#); [HANK DEEDS](#); ['Hillsdale Fire Dept'](#); ['Joel Eggers'](#); ['Joel Eggers'](#); ['Rick Oller'](#); ['Ricky Roggow'](#); ['Rusty Carter'](#)

**Subject:** Haz-Mit Meeting



**OFFICE OF  
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MANAGEMENT**



Good morning,

I wanted to remind everyone that our Hazard Mitigation Meeting is scheduled this Friday the 8<sup>th</sup> at 2 pm in the Oklahoma Room at Autry Tech. Attached, is the Public Notice being posted this week and the other is the Critical Structures doc that I was supposed to get to you all earlier. I received it late last week. Look it over, fill in what you can and we'll go over this at the meeting.

Also, the 2012 version of our Garfield County Emergency Operations Plan is complete. You can download a copy of it at [www.enid.org](http://www.enid.org) under emergency management and on the home page of [www.gcem.org](http://www.gcem.org)

See you all Friday.

Mike

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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**

**From:** [Mike Honigsberg](#)

**Date:** 6/8/2012 8:02:31 AM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); [Jason Skaggs](#); [John Hestand](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](mailto:mike.honigsberg@onenet.net); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](mailto:rskrapke@autrytech.edu); [Russell.Wilson@integris-health.com](mailto:Russell.Wilson@integris-health.com); [sdhime@enidk12.org](mailto:sdhime@enidk12.org); [Steve Somerlott](#); [Wilson, Russell A](#); [BOBBY TENNELL](#); [Brian Corderman](#); [Clarence Maly](#); [cody hawk](#); [Cory Rink](#); [Curtis Toews](#); [Derrick Harris](#); [DUSTIN KINGCADE](#); [Eric McVey](#); [HANK DEEDS](#); [Hillsdale Fire Dept](#); [Joel Eggers](#); [Joel Eggers](#); [Rick Oller](#); [Ricky Roggow](#); [Rusty Carter](#)

**Subject:** Reminder



**OFFICE OF  
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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR**

**410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

Hazard Mitigation Meeting today at 2pm at Autry tech in the Oklahoma room

Mike Honigsberg, Certified Director  
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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**

**From:** [Mike Honigsberg](#)

**Date:** 7/6/2012 12:34:52 PM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); [Jason Skaggs](#); [John Hestand](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Russell A](#); ['BOBBY TENNELL'](#); [Brian Corderman](#); ['Clarence Maly'](#); [cody hawk](#); ['Cory Rink'](#); [Curtis Toews](#); ['Derrick Harris'](#); ['DUSTIN KINGCADE'](#); ['Eric McVey'](#); [HANK DEEDS](#); ['Hillsdale Fire Dept'](#); ['Joel Eggers'](#); ['Joel Eggers'](#); ['Rick Oller'](#); ['Ricky Roggow'](#); ['Rusty Carter'](#)

**Subject:** NEXT MEETING.



**OFFICE OF  
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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

Good afternoon,

The next Hazard Mitigation Meeting will be Monday, July 16, 2012 at 2 pm at Autry Tech. We will meet in the Oklahoma Room, same room as last month. We are having this meeting on Monday because Hazard Mitigation Specialists personnel will be here for a Sunday evening meeting and I didn't see any reason for them to make a second trip this month. Hope you all can be there. Feel free to send this out to other business, school people and organizations as you all see fit.

Thanks

Mike

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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**

*From:* [Mike Honigsberg](#)

*Date:* 7/10/2012 1:46:49 PM

*To:* [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); [Jason Skaggs](#); [John Hestand](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Russell A](#); [BOBBY TENNELL](#); [Brian Corderman](#); [Clarence Maly](#); [cody hawk](#); [Cory Rink](#); [Curtis Toews](#); [Derrick Harris](#); [DUSTIN KINGCADE](#); [Eric McVey](#); [HANK DEEDS](#); [Hillsdale Fire Dept](#); [Joel Eggers](#); [Joel Eggers](#); [Rick Oller](#); [Ricky Roggow](#); [Rusty Carter](#)

*Subject:* Agenda for Next Monday



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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR**

**410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

Here is the agenda for the Monday meeting. Make every effort to attend.

Mike

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**HOW "YOU" COPE WITH THE REALITY OF DISASTER DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**

**From:** [Mike Honigsberg](#)

**Date:** 8/16/2012 1:57:07 PM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Dana Dennis](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); [Jason Skaggs](#); [John Hestand](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](mailto:mike.honigsberg@onenet.net); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](mailto:rskrapke@autrytech.edu); [Russell.Wilson@integris-health.com](mailto:Russell.Wilson@integris-health.com); [sdhime@enidk12.org](mailto:sdhime@enidk12.org); [Steve Somerlott](#); [Wilson, Russell A](#); ['BOBBY TENNELL'](#); [Brian Corderman](#); ['Clarence Maly'](#); [cody hawk](#); ['Cory Rink'](#); [Curtis Toews](#); ['Derrick Harris'](#); ['DUSTIN KINGCADE'](#); ['Eric McVey'](#); [HANK DEEDS](#); ['Hillsdale Fire Dept'](#); ['Joel Eggers'](#); ['Joel Eggers'](#); ['Rick Oller'](#); ['Ricky Roggow'](#); ['Rusty Carter'](#)

**Subject:** haz-mit meeting



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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

**Good afternoon everyone!!**

**Mark your calendars for I believe the last Hazard Mitigation Meeting we may have. The date- WEDNESDAY, SEPTEMBER 12, 2012. LOCATION: AUTRY TECH IN THE OKLAHOMA ROOM. Time- 1:30 -3:30 is the allotted timeframe.**

**See you all there.**

**Mike**

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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR"  
LEVEL OF PREPAREDNESS. Mike Honigsberg**

**From:** [Mike Honigsberg](#)

**Date:** 9/12/2012 9:23:47 AM

**To:** [Bill Presley](#); [Carolyn Bowling](#); [Corban Baker](#); [Cowen, Carissa](#); [Dana Dennis](#); [Darren Sharp](#); [David Burford](#); [David Van Nostrand](#); [Eric Benson](#); [Garfield County Commissioners](#); [Gary Naugle](#); [Jackie Wright](#); [Jason Skaggs](#); [John Hestand](#); [Kathy Hughes](#); [Kevin Hassler](#); [Kevin Morris](#); [Marc Bolz](#); [Mike Woods](#); [mike.honigsberg@onenet.net](#); [Rauh, Mary Jac](#); [Raydon Tilley](#); [rskrapke@autrytech.edu](#); [Russell.Wilson@integris-health.com](#); [sdhime@enidk12.org](#); [Steve Somerlott](#); [Wilson, Russell A](#); [BOBBY TENNELL](#); [Brian Corderman](#); [Clarence Maly](#); [cody hawk](#); [Cory Rink](#); [Curtis Toews](#); [Derrick Harris](#); [DUSTIN KINGCADE](#); [Eric McVey](#); [HANK DEEDS](#); [Hillsdale Fire Dept](#); [Joel Eggers](#); [Joel Eggers](#); [Rick Oller](#); [Ricky Roggow](#); [Rusty Carter](#)

- **Subject:** Meeting



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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

This is a reminder of the Hazard Mitigation Meeting today at 1:30pm at the Vo-Tech's Oklahoma Room.  
See you there!!

Mike

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Enid/Garfield County Emergency Management  
Chairman, Tri-County Emergency Services  
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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR"  
LEVEL OF PREPAREDNESS. Mike Honigsberg**

**From:** [Mike Honigsberg](#)  
**Date:** 9/26/2012 1:25:39 PM  
**To:** '[David Van Nostrend](#)'  
**Subject:** email to 2 large groups

David, Here is a copy of the email sent to 2 major groups here in the county. We may have a few from outside the county too at the meeting on the 16<sup>th</sup>. Talk soon.

Mike



**OFFICE OF  
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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

**!!!!!!IMPORTANT INFORMATION!!!!!!**

Good morning,

This email is going out to our Enid Area Disaster Planning Group (EADPG) and the Resource Alliance that meets at the Senior Life Network at the Mall. The reason for this email is that we are having a meeting on October 16<sup>th</sup> at 1:30pm at the M.E.R.C. This stands for the Medical Emergency Response Center. It's located at 1800 South Van Buren here in Enid. The EADPG is an organization that puts all of the players in a major disaster together in an Emergency Operations Center Environment. Several years ago we had a public get together to show our citizens who we all are and what we do and we get together about once a quarter now to discuss items of interest, new technologies in our various fields and we share ideas that would be pertinent in the event we had a major incident here in the Garfield County area. Keep in mind that this also pertains to stakeholders and other emergency services personnel that surround Garfield County. I consider all of us on the same team.



This stated; I would like to invite any Resource Alliance members to our meeting on the 16<sup>th</sup> and here's why. Many questions have been brought up how to care for our special needs people within our jurisdictions and who handles the various equipment to support those tasks. Input from the alliance would be beneficial to the MERC staff and all organizations in the region. All organizations within NW Oklahoma are asking who do we contact, how do we handle this and is there many options on taking care of those that need help. How many organizations are there? We all need to meet each other, work together, and understand the needs that are out there so that if the worst does happen, we have the insight and ability to make a bad situation a little better and hopefully less stressful over the course of the incident.

I encourage anyone within the Resource Alliance to make every effort to attend our meeting and give us insight and knowledge of what you do and what you can provide during those turbulent times and what you might need from any of us. It works both ways.

Our Hazard Mitigation People will be here to give us all a brief on the in progress work to date so far.

Look forward to seeing you there. If you have any questions, feel free to contact me at any of the numbers or email addresses below.

Have a great day!!

Mike

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Web Site-- [www.enid.org](http://www.enid.org)

**From:** [Mike Honigsberg](#)

**Date:** 10/15/2012 9:33:16 AM

**To:** [Mike Honigsberg](#)

**Subject:** MEETING-TUESDAY THE 16TH



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**FROM THE OFFICE OF EMERGENCY MANAGEMENT  
MIKE HONIGSBERG, CERTIFIED DIRECTOR  
410 West Garriott  
Enid, Oklahoma. 73701  
580-249-5969**

**!!!!!!IMPORTANT INFORMATION!!!!!!**

Good Monday Morning,

This is a reminder of the Enid Area Disaster Planning Group Meeting scheduled for Tuesday the 16<sup>th</sup> at 1:30 pm at The Medical Emergency Response Center at 1800 South Van Buren. This email is also going out to our Hazard Mitigation folks, The Resource Alliance, and our North Central Emergency Managers. We might have a crowd; at least I hope we do.

There are many things going on with our organizations and so we are trying to get everyone together to go over some important information. I had asked the Resource Alliance companies for a small brief on what they do and who they serve and have only received 1 response. I am getting their contact information from NODA so all of our agencies will have that info. I understand that everyone is busy so we'll adjust and move forward, No problem. Here is a short list of what our meeting agenda could look like for tomorrow. I am not making an official agenda but here is what we want to try to accomplish:

- 1- Introductions from all personnel
- 2- Short overview of all of our organizations-Mike Honigsberg-if I can talk ☐
- 2- A 15 minute presentation from Hazard Mitigation Specialists on our current status and what we will accomplish by having this plan.
- 3- Short presentation by the MERC –Bill or Carrie
- 4- Input from all groups

This meeting should help everyone get a better understanding how we all need to know each other, understand what each organization does, how we would work together in a disaster situation, and finally how we should be planning and exercising together.

Hope to see you all there. Several of you may get this email a few times as you are probably on different lists.

See you tomorrow.

Mike

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**HOW "YOU" COPE WITH THE REALITY OF DISASTER, DEPENDS ON "YOUR" LEVEL OF PREPAREDNESS. Mike Honigsberg**

- Agendas

# Agenda

## **Introductory Meeting – February 15, 2012** **Garfield County Hazard Mitigation Planning Team**

### **1:30 P.M.**

#### **WELCOME AND INTRODUCTIONS**

Garfield County  
Emergency Manager

Mike Honigsberg,

**Who are we and why are we here?**

David Van Nostrand  
Hazard Mitigation  
Specialists

**Who's involved?**

**Why are you here?**

**What is a Natural Hazard Mitigation Plan?**

#### **THE PLANNING PROCESS**

- ✓ **Organize Resources**
- ✓ **Assess the Risks**
- ✓ **Develop the Mitigation Plan**
- ✓ **Implement and Monitor progress**

#### **HAZARD ASSESSMENT**

#### **GOALS**

#### **CRITICAL FACILITIES –**

Judy Soos  
Hazard Mitigation  
Specialists

# Agenda

## **Meeting – April 27, 2012 Garfield County Hazard Mitigation Planning Team**

**2:00 P.M.**

**WELCOME AND INTRODUCTIONS  
Director  
E.E.M./G.C.E.M.**

**Mike Honigsberg,**

**PROJECTS –**

**Steve Somerlott  
Hazard Mitigation  
Specialists**

**Review of previous plans projects**

**Possible projects**

# Agenda

## **Meeting – July 16, 2012 Garfield County Hazard Mitigation Planning Team**

**2:00 P.M.**

**WELCOME  
Director  
E.E.M./G.C.E.M.**

**Mike Honigsberg,**

**PROJECTS –**

**Steve Somerlott  
Hazard Mitigation  
Specialists**

**Project development – This is the heart of the Hazard Mitigation Plan.**



- Meeting Minutes

| Meeting Minutes                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>NAME OF ORGANIZATION:</b>              | Garfield County Hazard Mitigation Planning Team                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |
| <b>PURPOSE OF MEETING:</b>                | Introduction and Critical Facilities Introduction                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                     |
| <b>DATE/TIME:</b>                         | February 15, 2012 1:30 P.M.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                     |
| <b>LOCATION:</b>                          | Autry Technology Center                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                     |
| <b>CHAIRPERSON:</b>                       | Mike Honigsberg, Chairman/Enid/Garfield County EM                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                     |
| Topics                                    | Meeting Content                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Participants                                        |
| Introductions and preliminary comments    | Introduction of participants etc. and general review of importance of the Hazard Mitigation Plan to the county and its jurisdictions.                                                                                                                                                                                                                                                                                                                                                    | Mike Honigsberg, Enid/Garfield Co. EM               |
| Purpose of Hazard Mitigation Plans        | Discussed the general purpose of the HM Plan which is to better prepare and alleviate the effects of the disaster events that could occur to their communities, schools or even the unincorporated areas.                                                                                                                                                                                                                                                                                | David Van Nostrand<br>Hazard Mitigation Specialists |
| Hazard Identification and Risk Assessment | Reviewed the fourteen hazards that occur in the state of Oklahoma. The participants identified ten potential hazards that have either occurred in Garfield County or could conceivably occur. Those hazards were: Drought; Earthquake; Extreme Heat; Flood; Hailstorm; High Winds; Lightning; Tornado; Wildfire and Winter Storm. The other hazards: Dam Failure; Expansive Soils; Landslide and Sink Holes were discussed but were not considered potential hazards in Garfield County. |                                                     |
| Adjournment                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mike Honigsberg                                     |

| Meeting Minutes                                                                                                                                                                                                                                                         |                                                    |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------|
| <b>NAME OF ORGANIZATION:</b>                                                                                                                                                                                                                                            | Garfield County Hazard Mitigation Planning Team    |              |
| <b>PURPOSE OF MEETING:</b>                                                                                                                                                                                                                                              | Review of previous meeting and Critical Facilities |              |
| <b>DATE/TIME:</b>                                                                                                                                                                                                                                                       | April 27, 2012 2:00 P.M.                           |              |
| <b>LOCATION:</b>                                                                                                                                                                                                                                                        | Autry Technology Center                            |              |
| <b>CHAIRPERSON:</b>                                                                                                                                                                                                                                                     | Mike Honigsberg, Chairman/Enid/Garfield County EM  |              |
| Topics                                                                                                                                                                                                                                                                  | Meeting Content                                    | Participants |
| <b>NOTE: Due to extreme weather conditions it was necessary to cancel earlier scheduled meetings. Therefore it was determined since many of the participants at this meeting were not at the first meeting we should basically review the first meeting. <i>JMS</i></b> |                                                    |              |

|                                                                  |                                                                                                                                                                |                                                  |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Introductions                                                    | Introduction of participant's and the importance of the Hazard Mitigation Plan.                                                                                | Mike Honigsberg, Enid/Garfield Co. EM            |
| Purpose of Hazard Mitigation Plans/Hazard ID and Risk Assessment | Reviewed the purpose of Hazard Mitigation Plans. The general format of the February meeting was followed and the same hazards were identified at this meeting. | David Van Nostrand Hazard Mitigation Specialists |
| Identification of Critical Facilities                            | Discussed the requirements for identifying a critical facility and why they are important. Distribution and discussion of the critical facilities form.        | Judy Soos, Hazard Mitigation Specialists         |
|                                                                  |                                                                                                                                                                |                                                  |
| Adjournment                                                      |                                                                                                                                                                | Mike Honigsberg                                  |

## Meeting Minutes

| <b>NAME OF ORGANIZATION:</b> | Garfield County Hazard Mitigation Planning Team                                                                                                                   |                                                |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <b>PURPOSE OF MEETING:</b>   | Introduction to Projects                                                                                                                                          |                                                |
| <b>DATE/TIME:</b>            | June 8, 2012 2:00 P.M.                                                                                                                                            |                                                |
| <b>LOCATION:</b>             | Autry Technology Center                                                                                                                                           |                                                |
| <b>CHAIRPERSON:</b>          | Mike Honigsberg, Chairman/Enid/Garfield County EM                                                                                                                 |                                                |
| Topics                       | Meeting Content                                                                                                                                                   | Participants                                   |
| Opening introductions        | Re-emphasized the need for involvement of all participants in the Hazard Mitigation Plan development.                                                             | Mike Honigsberg, Enid/Garfield Co. EM          |
| Review of Projects           | Reviewed the projects from the 2004 plan and the relevance of those projects as to whether they were completed, needed to be continued, to be deleted or updated. | Steve Somerlott, Hazard Mitigation Specialists |
|                              |                                                                                                                                                                   |                                                |
| Adjournment                  |                                                                                                                                                                   | Mike Honigsberg                                |

## Meeting Minutes

| <b>NAME OF ORGANIZATION:</b> | Garfield County Fire Chiefs Meeting               |                  |
|------------------------------|---------------------------------------------------|------------------|
| <b>PURPOSE OF MEETING:</b>   | Information gathering from fire chiefs and update |                  |
| <b>DATE/TIME:</b>            | July 15, 2012 6:00 P.M.                           |                  |
| <b>LOCATION:</b>             | Drummond Fire Department meeting room             |                  |
| <b>CHAIRPERSON:</b>          | Mike Honigsberg, Chairman/Enid/Garfield County EM |                  |
| Topics                       | Meeting Content                                   | Participants     |
| Introductory                 |                                                   | Mike Honigsberg, |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Comments                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Enid/Garfield Co. EM                                                                |
| Purpose of Hazard Mitigation Plans | Discussed the general purpose of the HM Plan which is to better prepare and alleviate the effects of the disaster events that could occur to their communities, schools or even the unincorporated areas. Reviewed the work that has already been done by the GCHMPT. Emphasized the importance of Fire Department involvement in the process since they will be the first responding to any of the potential disasters in their jurisdiction or in neighboring jurisdictions. Their input is important. Invited them to meeting the next afternoon. | David Van Nostrand, Steve Somerlott, Michael DeReamer Hazard Mitigation Specialists |
|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |
| Adjournment                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Committee Chairman                                                                  |

## Meeting Minutes

| <b>NAME OF ORGANIZATION:</b> | Garfield County Hazard Mitigation Planning Team                               |                                                |
|------------------------------|-------------------------------------------------------------------------------|------------------------------------------------|
| <b>PURPOSE OF MEETING:</b>   | Projects continued                                                            |                                                |
| <b>DATE/TIME:</b>            | July 16, 2012 2:00 P.M.                                                       |                                                |
| <b>LOCATION:</b>             | Autry Technology Center                                                       |                                                |
| <b>CHAIRPERSON:</b>          | Mike Honigsberg, Chairman/Enid/Garfield County EM                             |                                                |
| Topics                       | Meeting Content                                                               | Participants                                   |
| Introductory Comments        |                                                                               | Mike Honigsberg, Enid/Garfield Co. EM          |
| Possible new projects        | Discussed the possibilities of additional projects for each potential hazard. | Steve Somerlott, Hazard Mitigation Specialists |
|                              |                                                                               |                                                |
| Adjournment                  |                                                                               | Mike Honigsberg                                |

## Meeting Minutes

|                              |                                                   |  |
|------------------------------|---------------------------------------------------|--|
| <b>NAME OF ORGANIZATION:</b> | Garfield County Hazard Mitigation Planning Team   |  |
| <b>PURPOSE OF MEETING:</b>   | Projects finalization                             |  |
| <b>DATE/TIME:</b>            | September 12, 2012 1:30 P.M.                      |  |
| <b>LOCATION:</b>             | Autry Technology Center                           |  |
| <b>CHAIRPERSON:</b>          | Mike Honigsberg, Chairman/Enid/Garfield County EM |  |

| Topics       | Meeting Content                                                                                      | Participants                                   |
|--------------|------------------------------------------------------------------------------------------------------|------------------------------------------------|
| New projects | Additional projects for each potential hazard and additional information for those already selected. | Steve Somerlott, Hazard Mitigation Specialists |
|              |                                                                                                      |                                                |
| Adjournment  |                                                                                                      | Mike Honigsberg                                |

| Meeting Minutes              |                                                                                                                                                                                                                                                                                                                               |                                                                                     |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>NAME OF ORGANIZATION:</b> | Garfield County School Superintendents                                                                                                                                                                                                                                                                                        |                                                                                     |
| <b>PURPOSE OF MEETING:</b>   | Update and Review of Hazard Mitigation Plan                                                                                                                                                                                                                                                                                   |                                                                                     |
| <b>DATE/TIME:</b>            | September 20, 2012                                                                                                                                                                                                                                                                                                            |                                                                                     |
| <b>LOCATION:</b>             | Autry Technology Center – Board Room                                                                                                                                                                                                                                                                                          |                                                                                     |
| <b>CHAIRPERSON:</b>          | Mike Honigsberg, Chairman/Enid/Garfield County EM                                                                                                                                                                                                                                                                             |                                                                                     |
| Topics                       | Meeting Content                                                                                                                                                                                                                                                                                                               | Participants                                                                        |
| Introductory Comments        |                                                                                                                                                                                                                                                                                                                               | Mike Honigsberg, Enid/Garfield Co. EM                                               |
| Review and Questions/Answers | Discussed the general purpose of the HM Plan which is to better prepare and alleviate the effects of the disaster events that could occur to their communities, schools or even the unincorporated areas. Reviewed the work that has already been done by the GCHMPT. Emphasized importance of their input and participation. | David Van Nostrand, Steve Somerlott, Michael DeRemer; Hazard Mitigation Specialists |
|                              |                                                                                                                                                                                                                                                                                                                               |                                                                                     |
| Adjournment                  |                                                                                                                                                                                                                                                                                                                               | Committee Chair.                                                                    |

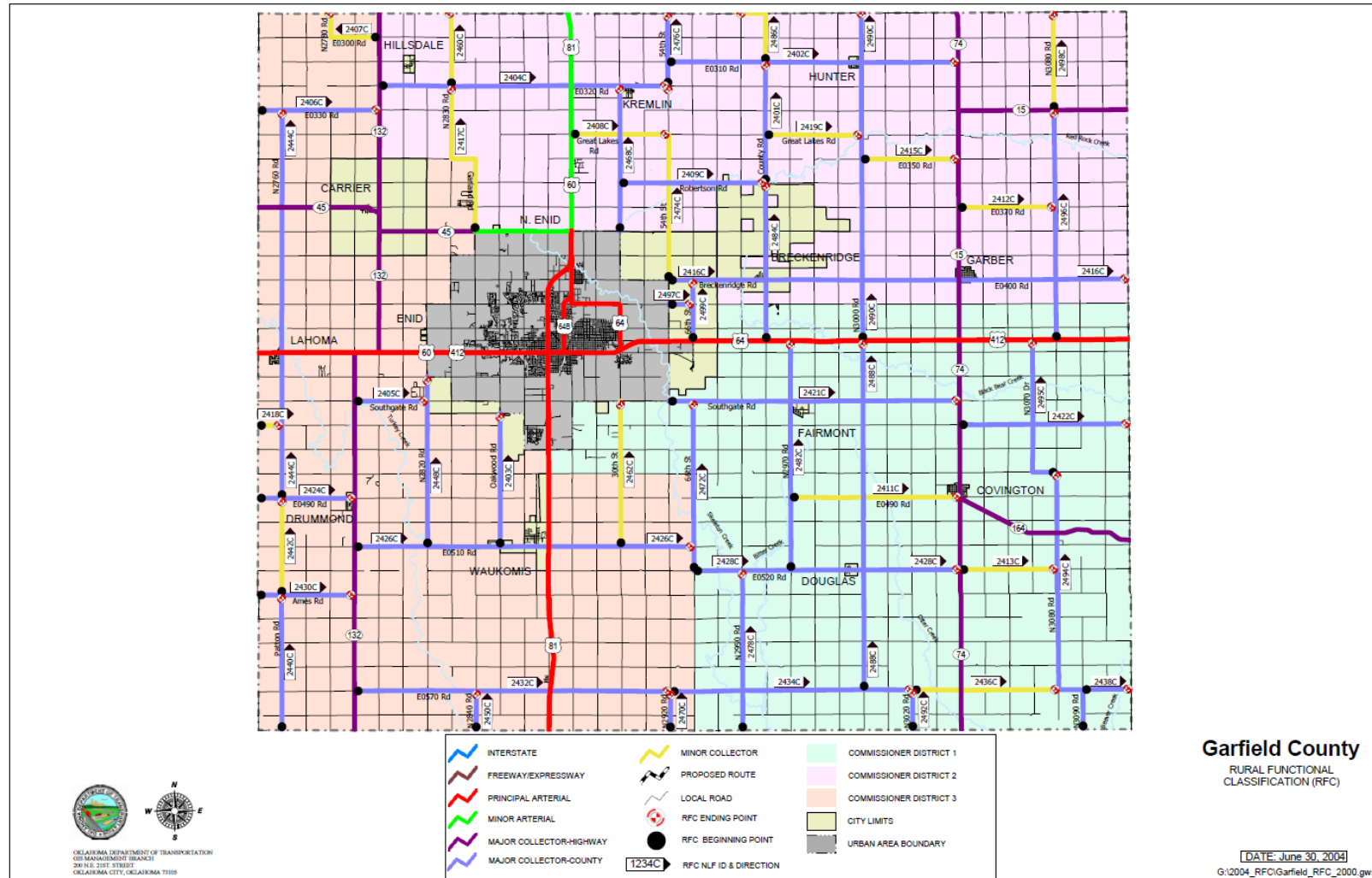
| Meeting Minutes              |                                                                                                                     |                     |
|------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>NAME OF ORGANIZATION:</b> | Enid Area Disaster Planning Group (EADPG)                                                                           |                     |
| <b>PURPOSE OF MEETING:</b>   | Citizen Review Meeting                                                                                              |                     |
| <b>DATE/TIME:</b>            | October 16, 2012 - 1:30 P.M.                                                                                        |                     |
| <b>LOCATION:</b>             | Medical Emergency Response Center                                                                                   |                     |
| <b>CHAIRPERSON:</b>          | Mike Honigsberg, Chairman/Enid/Garfield County EM                                                                   |                     |
| Topics                       | Meeting Content                                                                                                     | Participants        |
| Preview and Introduction     | Gave a preview of what was required of Garfield County to develop HM Plan and how it relates to disaster readiness. | Mike Honigsberg- EM |
| Review and Update            | Explained the purpose of the Hazard Mitigation                                                                      | David Van Nostrand  |

|             |                                                                                                                                                                                      |                |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|             | Plan to participants since many were from neighboring jurisdictions/counties. Reviewed the work done by the GCHMPT and obtained input information from participants in this meeting. |                |
| Adjournment |                                                                                                                                                                                      | EADPG Chairman |

| Meeting Minutes                                                                                |                                                                                                                            |                                                                                     |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>NAME OF ORGANIZATION:</b>                                                                   | Garfield County Hazard Mitigation Planning Team                                                                            |                                                                                     |
| <b>PURPOSE OF MEETING:</b>                                                                     | Capability Assessment                                                                                                      |                                                                                     |
| <b>DATE/TIME:</b>                                                                              | September 11, 2013 1:30 P.M.                                                                                               |                                                                                     |
| <b>LOCATION:</b>                                                                               | Autry Technology Center                                                                                                    |                                                                                     |
| <b>CHAIRPERSON:</b>                                                                            | Mike Honigsberg, Chairman/Enid/Garfield County EM                                                                          |                                                                                     |
| Topics                                                                                         | Meeting Content                                                                                                            | Participants                                                                        |
| <b>NOTE: Due to changes in requirements, this subject was not covered in earlier meetings.</b> |                                                                                                                            |                                                                                     |
| Introductory Comments                                                                          | Explanation of the need for this additional meeting.                                                                       | Mike Honigsberg, Enid/Garfield Co. EM                                               |
| Review of CA form                                                                              | Passed out copies of the form for Capability Assessment evaluation and explained the various topics contained in the form. | David Van Nostrand, Steve Somerlott, Michael DeRemer; Hazard Mitigation Specialists |
|                                                                                                |                                                                                                                            |                                                                                     |
| Adjournment                                                                                    |                                                                                                                            | Mike Honigsberg                                                                     |

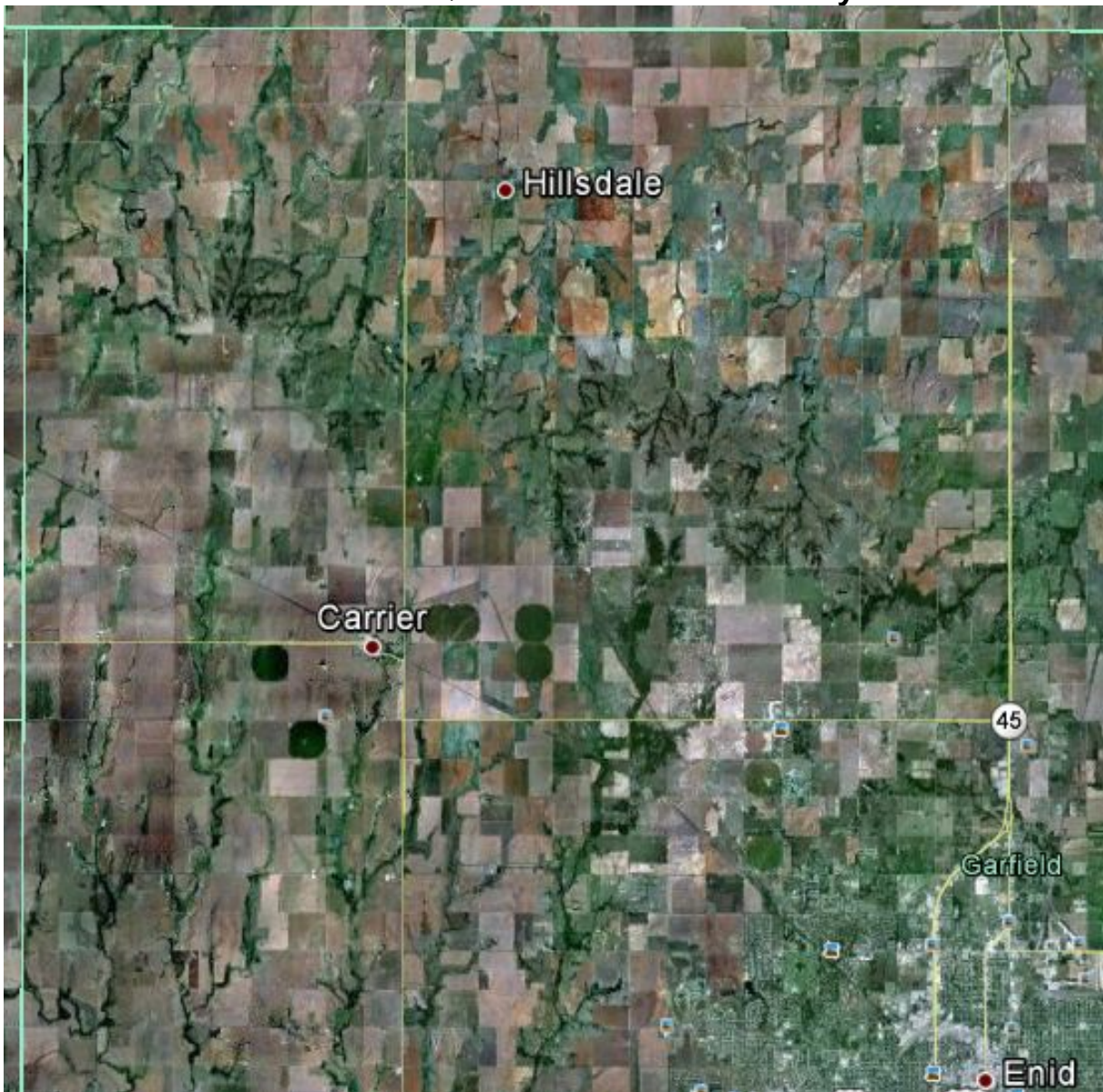
## Appendix C – Maps

### • GARFIELD COUNTY BOUNDARIES



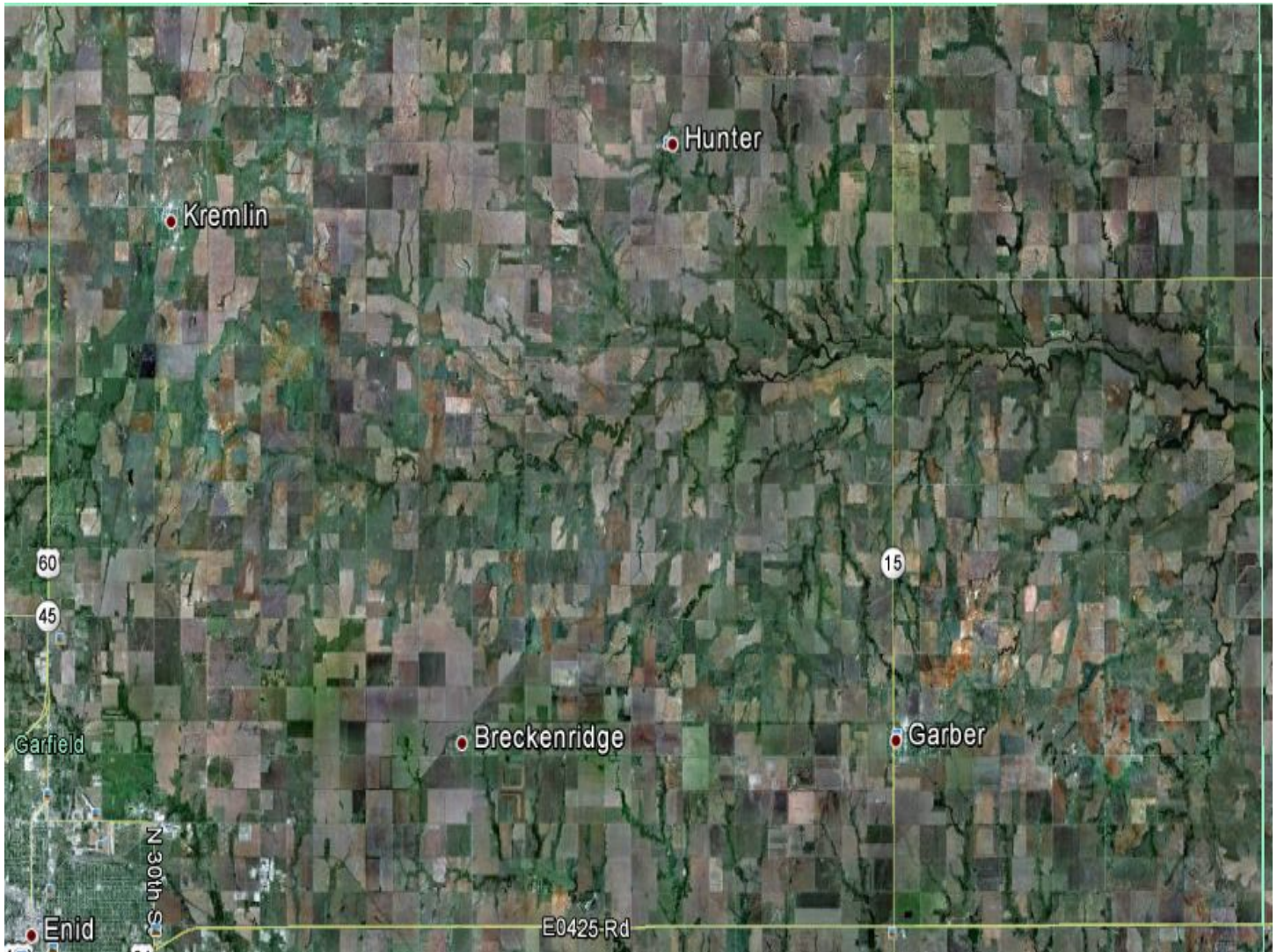


## Northwest Quarter of Garfield County



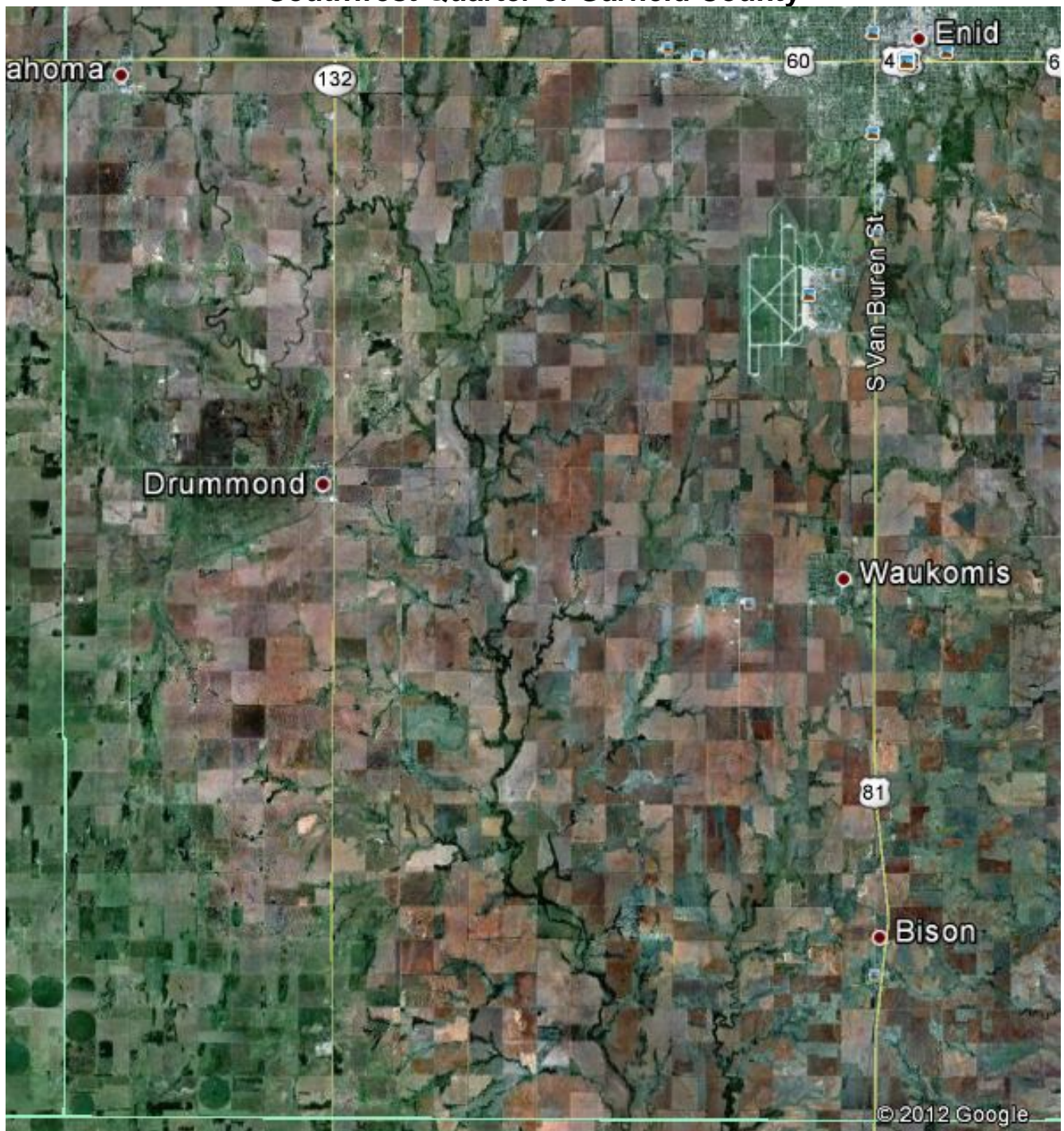


## Northeast Quarter of Garfield County





## Southwest Quarter of Garfield County





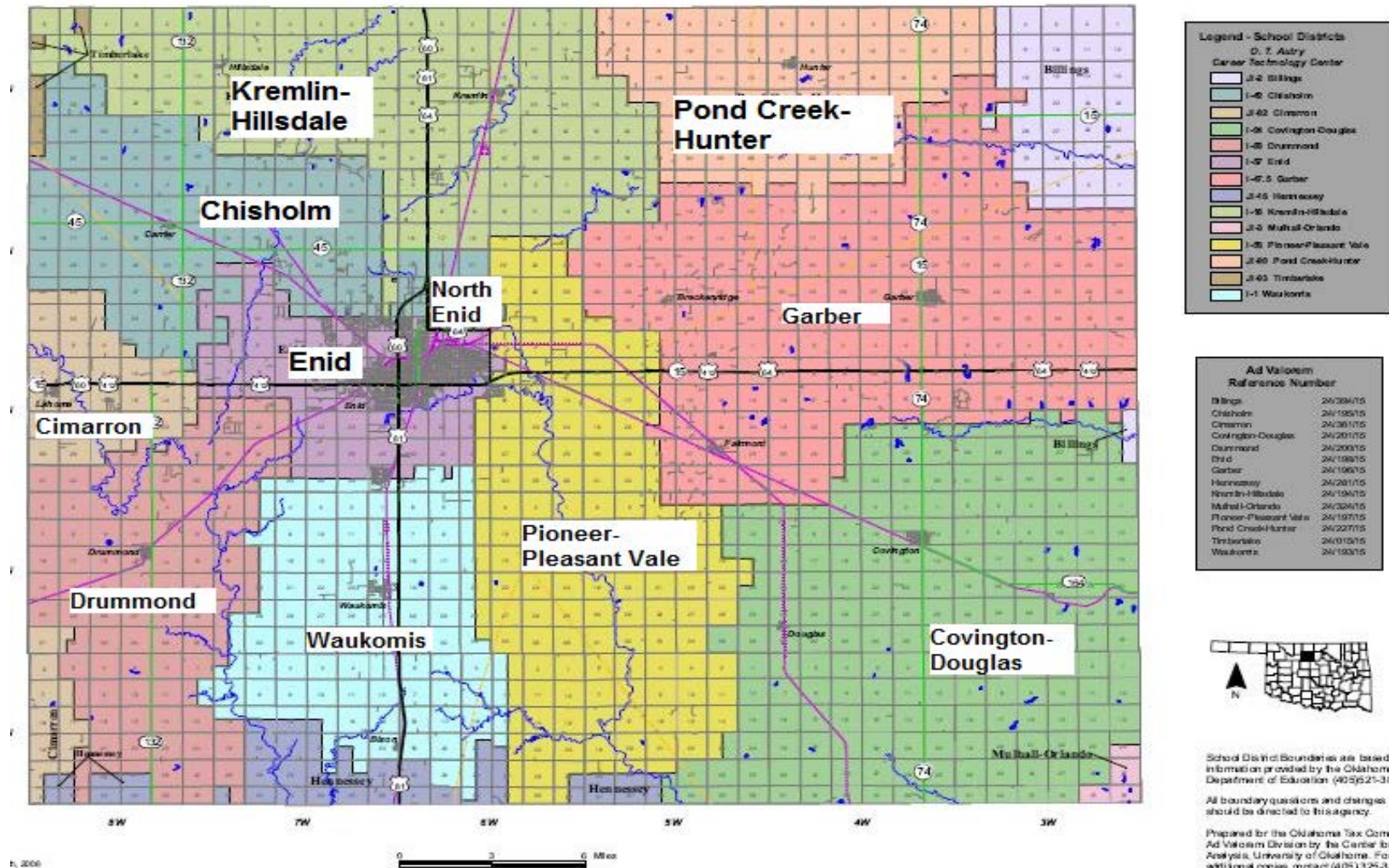
## Northwest Quarter of Garfield County





- Garfield County School Districts

## Garfield County





- **Garfield County Fire Departments**





## State All Hazard Mutual Aid Agreement

### §63-695.1. Short title.

Sections 3 through 12 of this act shall be known and may be cited as the "Oklahoma Intrastate Mutual Aid Compact".

Added by Laws 2006, c. 199, § 3, emerg. eff. May 26, 2006.

### §63-695.2. Purpose - Definitions - Statewide mutual aid system - Reimbursement.

A. The purpose of the Oklahoma Intrastate Mutual Aid Compact is to create a system of intrastate mutual aid between participating jurisdictions in the state.

B. As used in the Oklahoma Intrastate Mutual Aid Compact:

1. "Jurisdiction" means any county, city, town or municipal corporation of the State of Oklahoma represented by an elected governing body.

Sovereign Tribal Nations in the State of Oklahoma shall also be considered jurisdictions under the Oklahoma Intrastate Mutual Aid Compact and participating unless electing not to participate or later withdrawing from the system;

2. "Emergency" means any occasion or instance for which assistance is needed to supplement local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe; and

3. "Emergency responder" means anyone with special skills, qualifications, training, knowledge, and experience in the public or private sectors that would be beneficial to a participating jurisdiction in response to a local emergency as defined in applicable law or ordinance or authorized drill or exercise.

C. Each participant of the system shall recognize that emergencies transcend political jurisdictional boundaries and that intergovernmental coordination is essential for the protection of lives and property and for best use of available assets both public and private. The system shall provide for mutual assistance among the participating jurisdictions in the prevention of, response to, and recovery from, any disaster that results in a formal state of emergency in a participating jurisdiction subject to the criterion for declaration of that participating jurisdiction. The system shall provide for mutual cooperation among the participating jurisdictions in conducting disaster-related exercises, testing, or other training activities outside actual declared emergency periods. This legislation provides no immunity, rights, or privileges for any individual responding to a state of emergency that is not requested and/or authorized to respond by a participating jurisdiction. Participating jurisdictions will be ensured eligibility, to the fullest extent possible, for state and federal disaster funding.

D. All jurisdictions within the state, upon enactment of this legislation, are automatically a part of the statewide mutual aid system. A jurisdiction within the state may elect not to participate or to later withdraw from the system upon enacting an appropriate resolution by its governing body declaring that it elects not to participate in the statewide mutual aid system and providing a copy of the resolution to the Oklahoma Department of Emergency Management. This legislation does not preclude participating jurisdictions from entering into supplementary agreements with another jurisdiction and does not affect any other agreement to which a jurisdiction may currently be a party or decide to be a party to.

E. Many disasters begin as emergencies where local jurisdictions require fire service and/or law enforcement assistance. These services would normally be requested and provided at the department level as normal day-to-day operations with no reimbursement. If an incident response expands beyond a normal day-to-day emergency into a disaster situation, reimbursement for mutual aid services may be necessary and will be in accordance with the Federal Emergency Management Agency reimbursement policy.

F. In support of the Emergency Management Compact, Section 684.1 et seq. of Title 63 of the Oklahoma Statutes, the Governor or the representative of the Governor may request mutual aid assistance from local jurisdictions for other states or their jurisdictions. In such situations, the assisting local jurisdiction shall be considered an agent of the state.

Added by Laws 2006, c. 199, § 4, emerg. eff. May 26, 2006.

§63-695.3. Prompt, full and effective response - Legally designated jurisdiction official.

Each jurisdiction recognizes that there will be emergencies which require immediate actions and implementation of procedures to apply outside resources to make prompt and effective response to such an emergency. This is because few, if any, individual jurisdictions have all the resources they need in all types of emergencies and the capability of delivering resources to the area where emergencies occur.

The prompt, full and effective utilization of resources of the participating jurisdictions, including any resources on hand or available from any other source, that are essential to the safety, care, and welfare of the people in the event of any emergency or disaster declared by a party jurisdiction, shall be the underlying principle on which all articles of this Compact shall be understood.

On behalf of the chief elected officer of each jurisdiction participating in the Compact, the legally designated jurisdiction official who is assigned responsibility for emergency management will be responsible for the formulation of the appropriate aid plans and procedures necessary to implement the Compact.

Added by Laws 2006, c. 199, § 5, emerg. eff. May 26, 2006

§63-695.4. Procedural plans and programs - Requests for assistance - Consultation between jurisdictions - Discretion.

A. It shall be the responsibility of each jurisdiction to formulate procedural plans and programs for interjurisdictional cooperation in the performance of the responsibilities listed in this section. In formulating such plans, and in carrying them out, the jurisdictions, insofar as practical, shall:

1. Review individual jurisdictional hazards analyses and, to the extent reasonably possible, determine all those potential emergencies the jurisdictions might jointly suffer, whether due to natural or man-made disasters or emergencies;

2. Review individual emergency plans of the jurisdictions and develop a plan that will determine the mechanism for the interjurisdictional management and provision of assistance concerning any potential emergency;

3. Develop interjurisdictional procedures to fill any identified gaps and to resolve any identified inconsistencies or overlaps in existing or developed plans;

4. Assist in warning communities adjacent to or crossing the jurisdictional boundaries;

5. Protect and assure uninterrupted delivery of services, medicines, water, food, energy and fuel, search and rescue, critical lifeline equipment, and resources, both human and material;

6. Inventory and set procedures for the interjurisdictional loan and delivery of human and material resources, together with procedures for reimbursement or forgiveness; and

7. Provide, to the extent authorized by law, for temporary suspension of any statutes or ordinances that restrict the implementation of the above responsibilities.

All jurisdictions should use and conform to the current national standard for on-scene management and command systems.

B. The authorized representative of a jurisdiction may request assistance of another jurisdiction by contacting the authorized representative of that jurisdiction. The provisions of the Oklahoma Intrastate Mutual Aid Compact shall apply only to requests for assistance made by and to authorized representatives. Requests may be verbal or in writing. If verbal, the request

shall be confirmed in writing within thirty (30) days of the verbal request. Requests shall provide the following information:

1. A description of the emergency service function for which assistance is needed including, but not limited to, fire services, law enforcement, emergency medical, transportation, communications, public works and engineering, building inspection, planning and information assistance, mass care, resource support, health and medical services, and search and rescue;

2. The amount and type of personnel, equipment, materials and supplies needed and a reasonable estimate of the length of time they will be needed; and

3. The specific place and time for staging of the response of the assisting party and a point of contact at that location.

C. There shall be frequent consultation between jurisdiction officials who have assigned emergency management responsibilities and other appropriate representatives of the jurisdictions with affected jurisdictions, with free exchange of information, plans, and resource records relating to emergency capabilities.

D. Jurisdictions shall not be obligated under the Compact to send the requested assistance, and assistance may be withdrawn at any time in the sole and absolute discretion of the jurisdiction.

Added by Laws 2006, c. 199, § 6, emerg. eff. May 26, 2006.

§63-695.5. Necessary actions and provisions - Powers, duties, rights and privileges of emergency forces - Command and control.

Any jurisdiction requested to render mutual aid or conduct exercises and training for mutual aid shall take such action as is necessary to provide and make available the resources covered by the Oklahoma Intrastate Mutual Aid Compact in accordance with the terms hereof; provided that it is understood that the jurisdiction rendering aid may withhold resources to the extent necessary to provide reasonable protection for its own jurisdiction.

Each jurisdiction shall afford the emergency forces of any jurisdiction, while operating within its jurisdictional limits under the terms and conditions of the Compact, the same powers, duties, rights, and privileges as are afforded forces of the jurisdiction in which they are performing emergency services. Emergency forces will continue under the command and control of their regular leaders, but the organizational units will come under operational control of the emergency services authorities of the jurisdiction receiving assistance and must report to the incident check-in location for assignment.

Added by Laws 2006, c. 199, § 7, emerg. eff. May 26, 2006.

§63-695.6. Professional, mechanical or other licenses, certificates or permits. Whenever any person holds a license, certificate, or other permit issued by any jurisdiction party evidencing the meeting of qualifications for professional, mechanical, or other skills, and when such assistance is requested by the receiving jurisdiction, such person shall be deemed licensed, certified, or permitted by the jurisdiction requesting assistance to render aid involving such skill to meet a declared emergency or disaster, subject to such limitations and conditions as the requesting jurisdiction may prescribe by executive order or otherwise.

Added by Laws 2006, c. 199, § 8, emerg. eff. May 26, 2006.

§63-695.7. Liability and immunity.

Officers or employees of a jurisdiction rendering aid in another jurisdiction pursuant to the Oklahoma Intrastate Mutual Aid Compact shall be considered within the scope of employment of the requesting jurisdiction for tort liability and immunity purposes. No jurisdiction or its officers or employees rendering aid in another jurisdiction pursuant to the Compact shall be liable on account of any act or omission in good faith on the jurisdiction of such forces while so engaged

or on account of the maintenance or use of any equipment or supplies in connection therewith. Good faith shall not include willful misconduct, gross negligence, or recklessness. Added by Laws 2006, c. 199, § 9, emerg. eff. May 26, 2006.

§63-695.8. Compensation and death benefits.

Each jurisdiction shall provide for the payment of compensation and death benefits to injured members of the emergency forces of that jurisdiction and representatives of deceased members of such forces who sustain injuries or are killed while rendering aid pursuant to the Oklahoma Intrastate Mutual Aid Compact, in the same manner and on the same terms as if the injury or death were sustained within its own jurisdiction.

Added by Laws 2006, c. 199, § 10, emerg. eff. May 26, 2006.

§63-695.9. Reimbursement for loss, damage, expense or cost.

Any jurisdiction rendering aid in another jurisdiction pursuant to the Oklahoma Intrastate Mutual Aid Compact shall be reimbursed by the jurisdiction receiving such aid for any loss or damage to or expense incurred in the operation of any equipment and the provision of any service in answering a request for aid and for the costs incurred in connection with such requests; provided, that any aiding jurisdiction may assume in whole or in part such loss, damage, expense, or other cost, or may loan such equipment or donate such services to the receiving jurisdiction without charge or cost; and provided further, that any two or more jurisdictions may enter into supplementary agreements establishing a different allocation of costs among those jurisdictions. Compensation expenses shall not be reimbursable under this section.

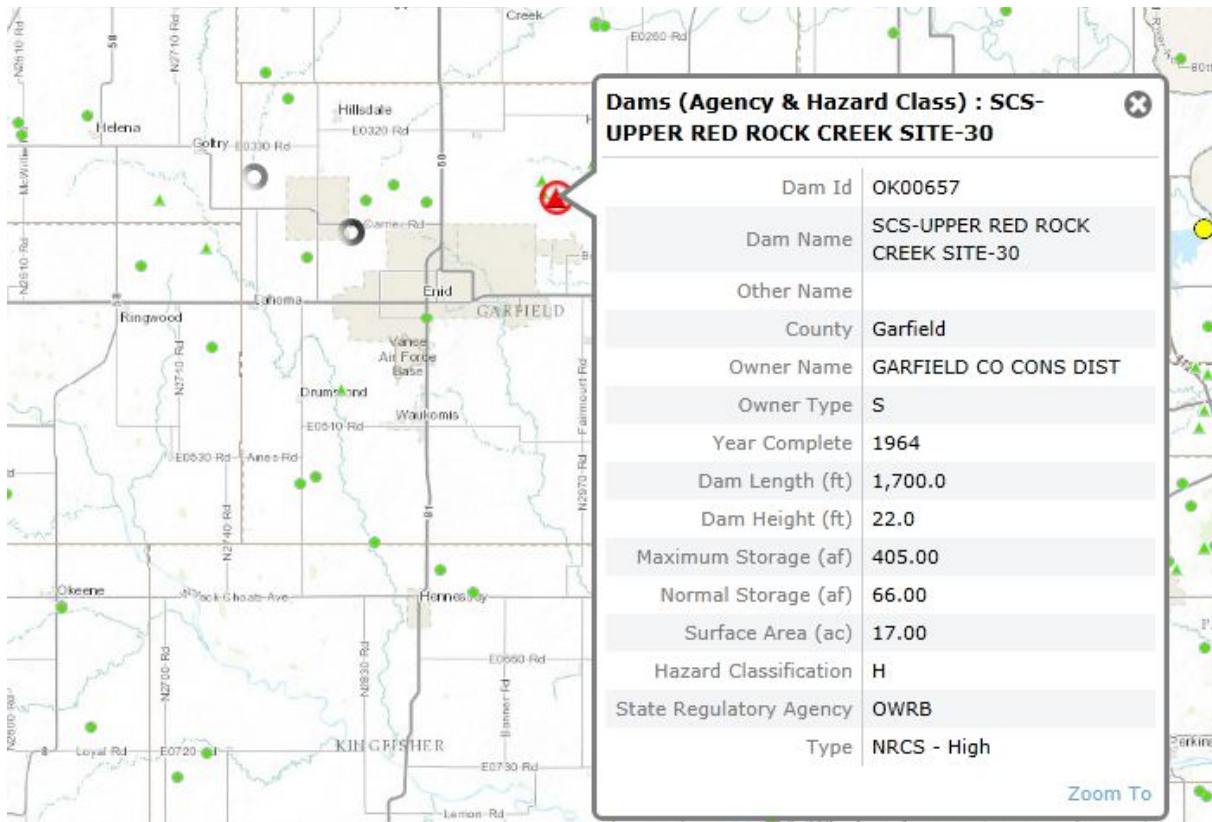
Added by Laws 2006, c. 199, § 11, emerg. eff. May 26, 2006.

§63-695.10. Plans for evacuation and interjurisdiction reception of civilian population.

Plans for the orderly evacuation and interjurisdiction reception of portions of the civilian population as the result of any emergency or disaster of sufficient proportions to so warrant, shall be worked out and maintained between the party jurisdictions of the Oklahoma Intrastate Mutual Aid Compact and the emergency management or services directors of the various jurisdictions where any type of incident requiring evacuations might occur. Such plans shall be put into effect by request of the jurisdiction from which evacuees come and shall include the manner of transporting such evacuees, the number of evacuees to be received in different areas, the manner in which food, clothing, housing, and medical care will be provided, the registration of evacuees, the providing of facilities for the notification of relatives or friends, and the forwarding of such evacuees to other areas or the bringing in of additional materials, supplies, and all other relevant factors.

Added by Laws 2006, c. 199, § 12, emerg. eff. May 26, 2006.

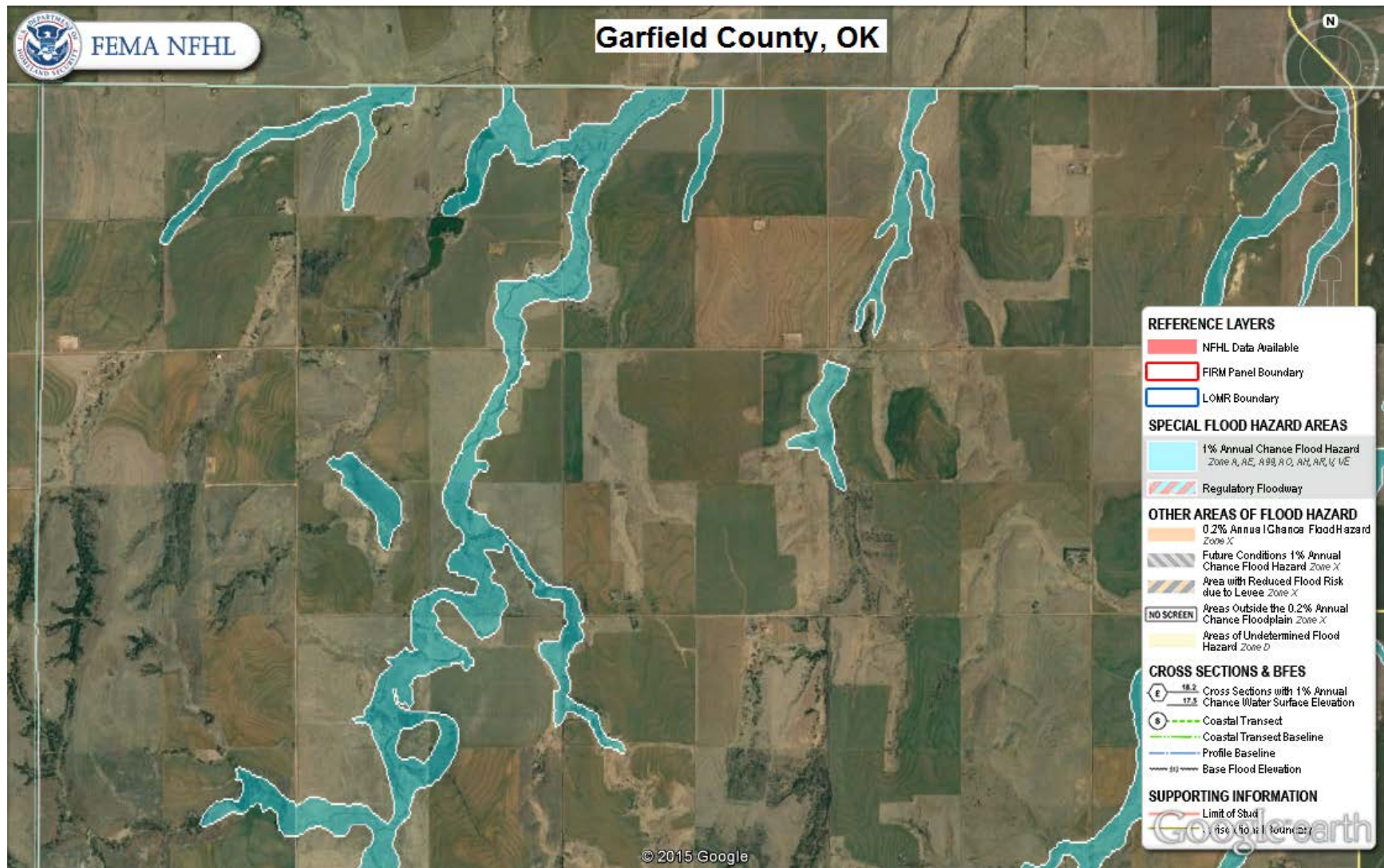
High Hazard Dam – Oklahoma Water Resources Board  
Only high hazard dam listed by the Oklahoma Water Resources Board in Garfield County.



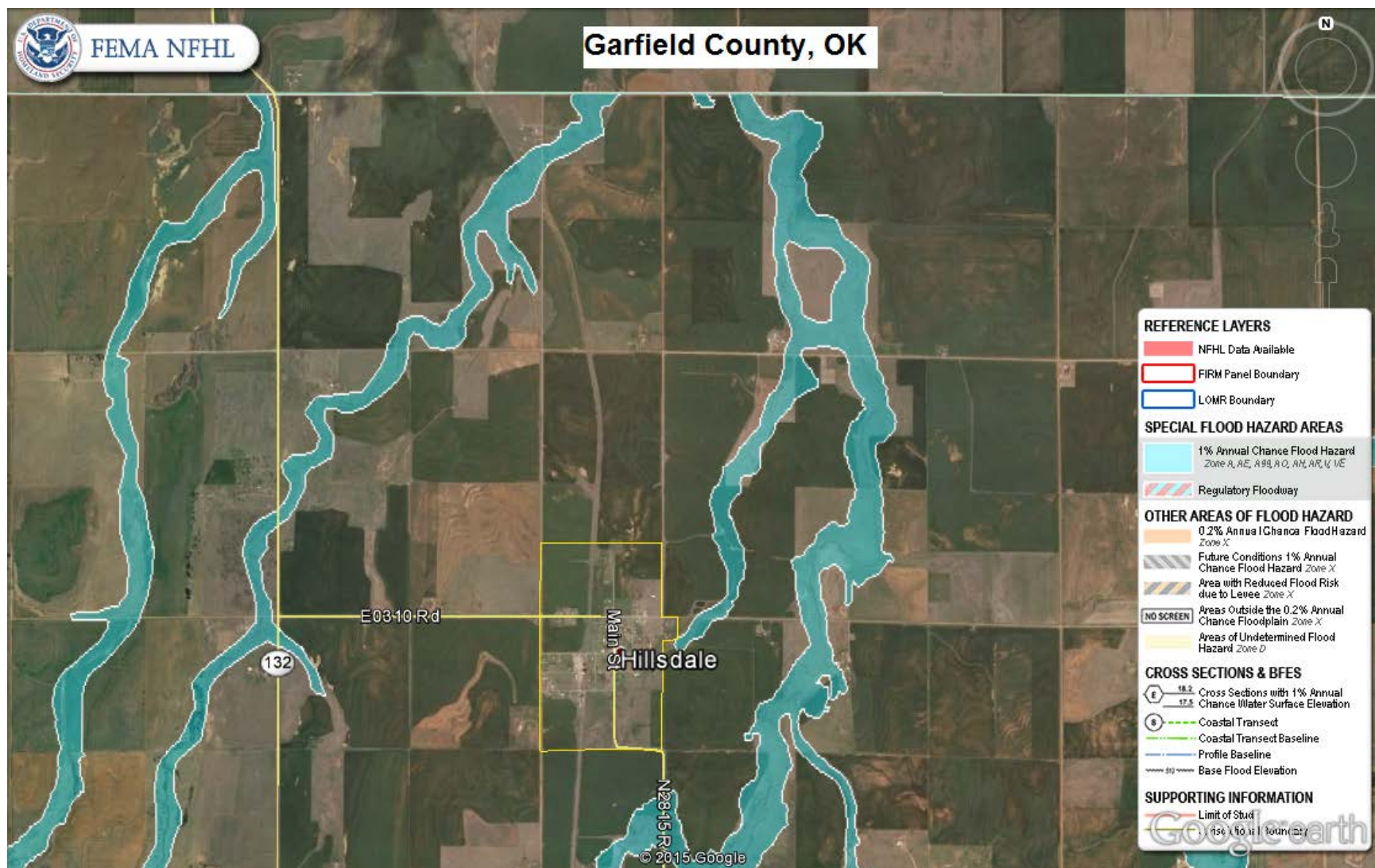


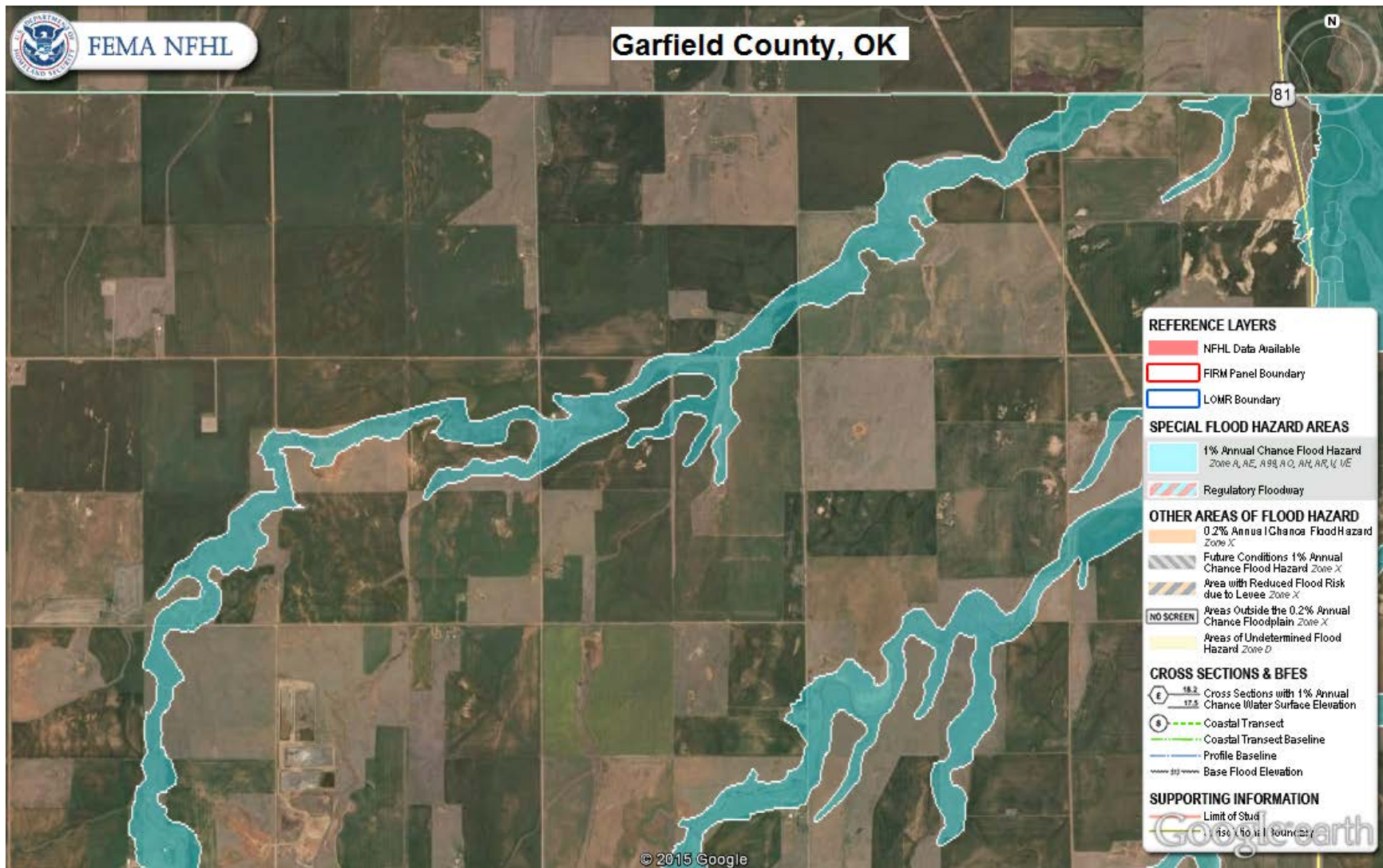




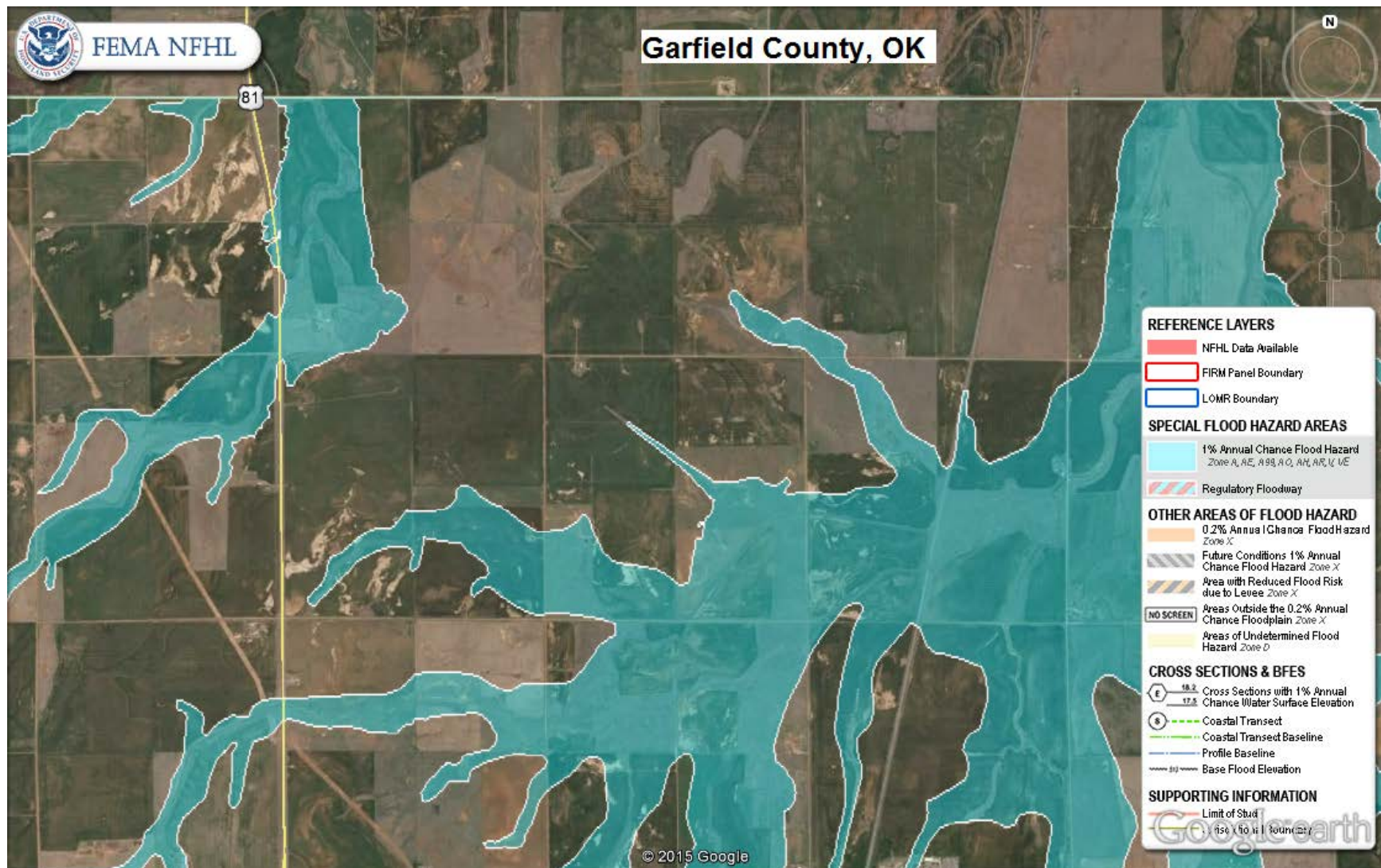


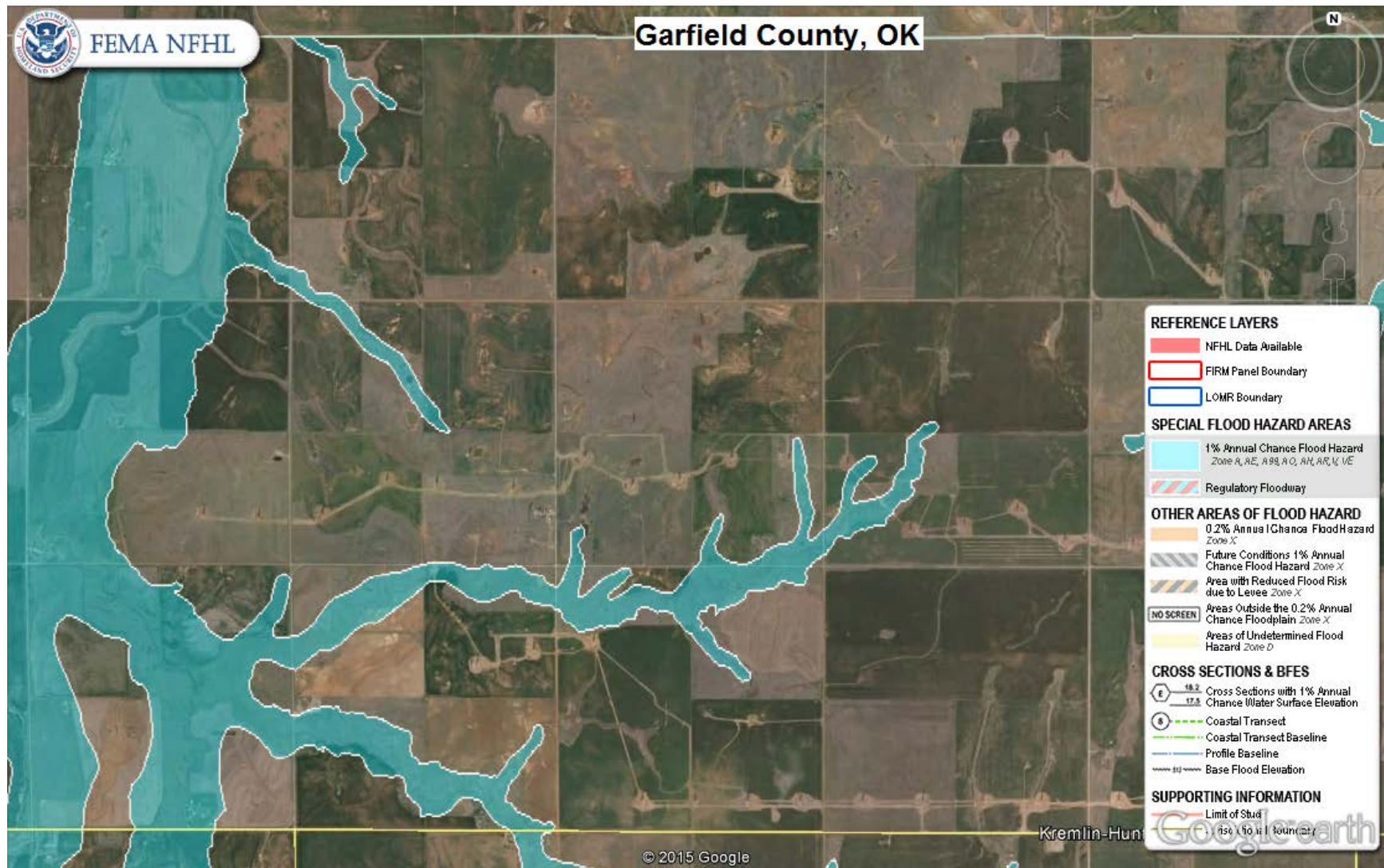




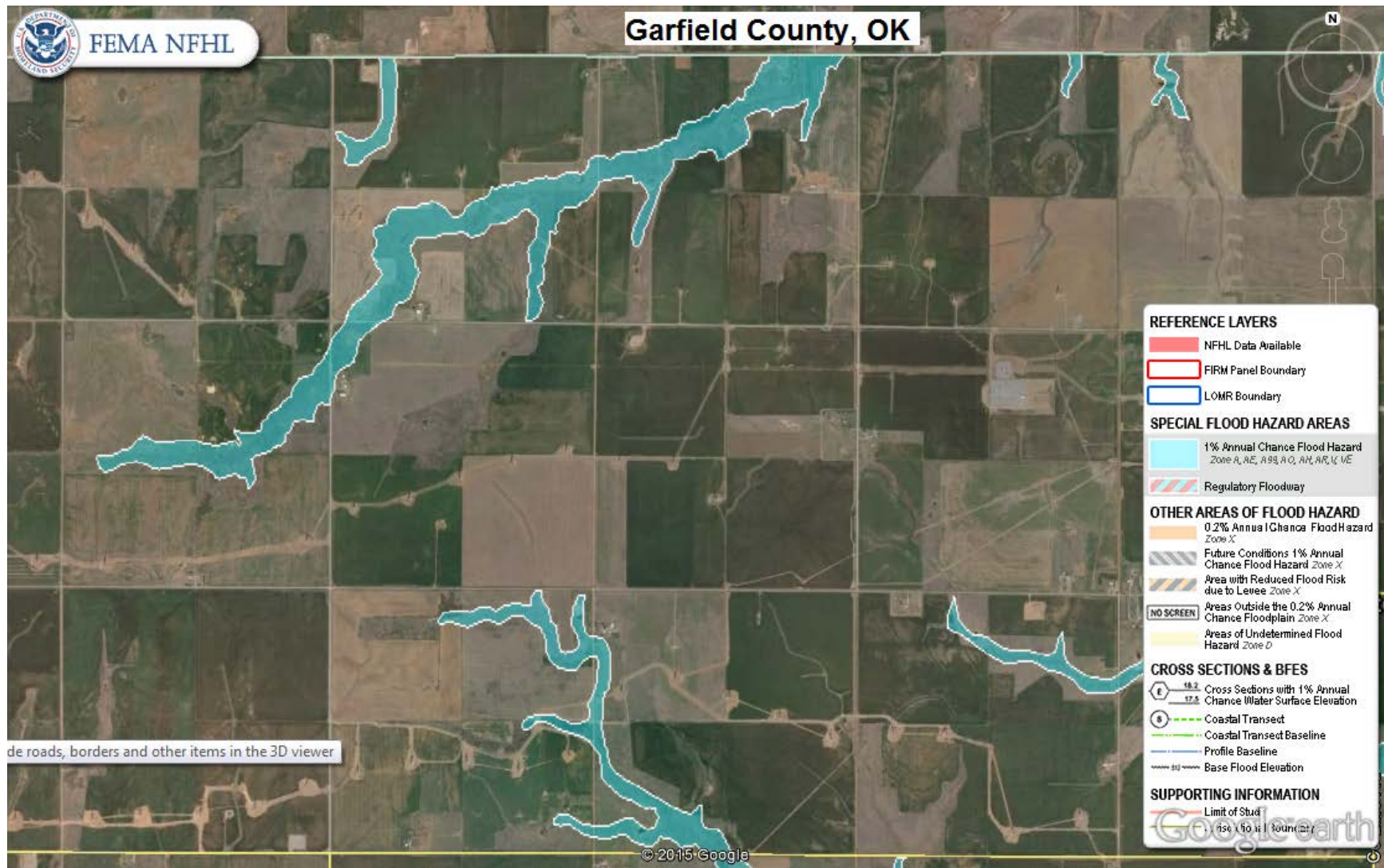


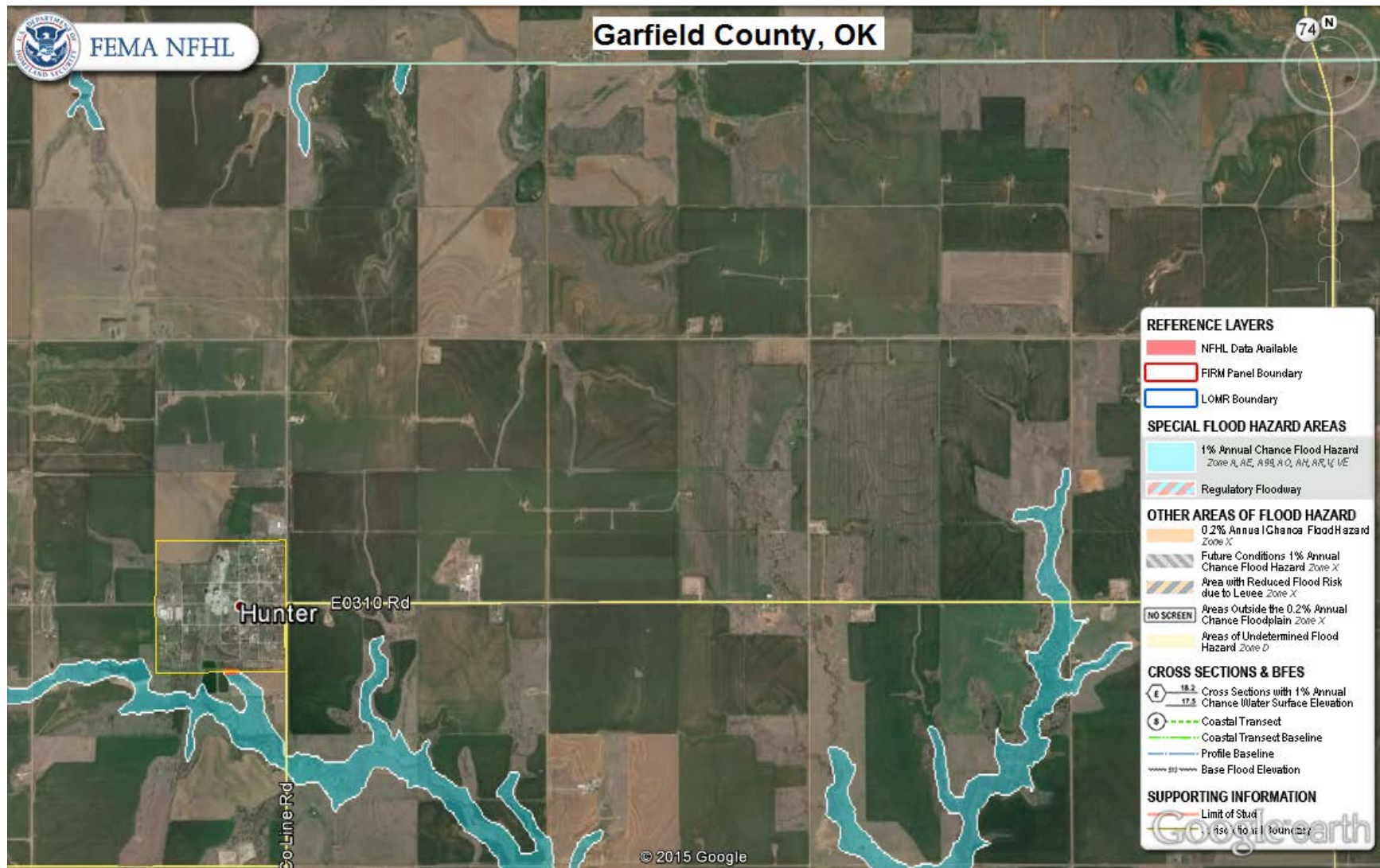




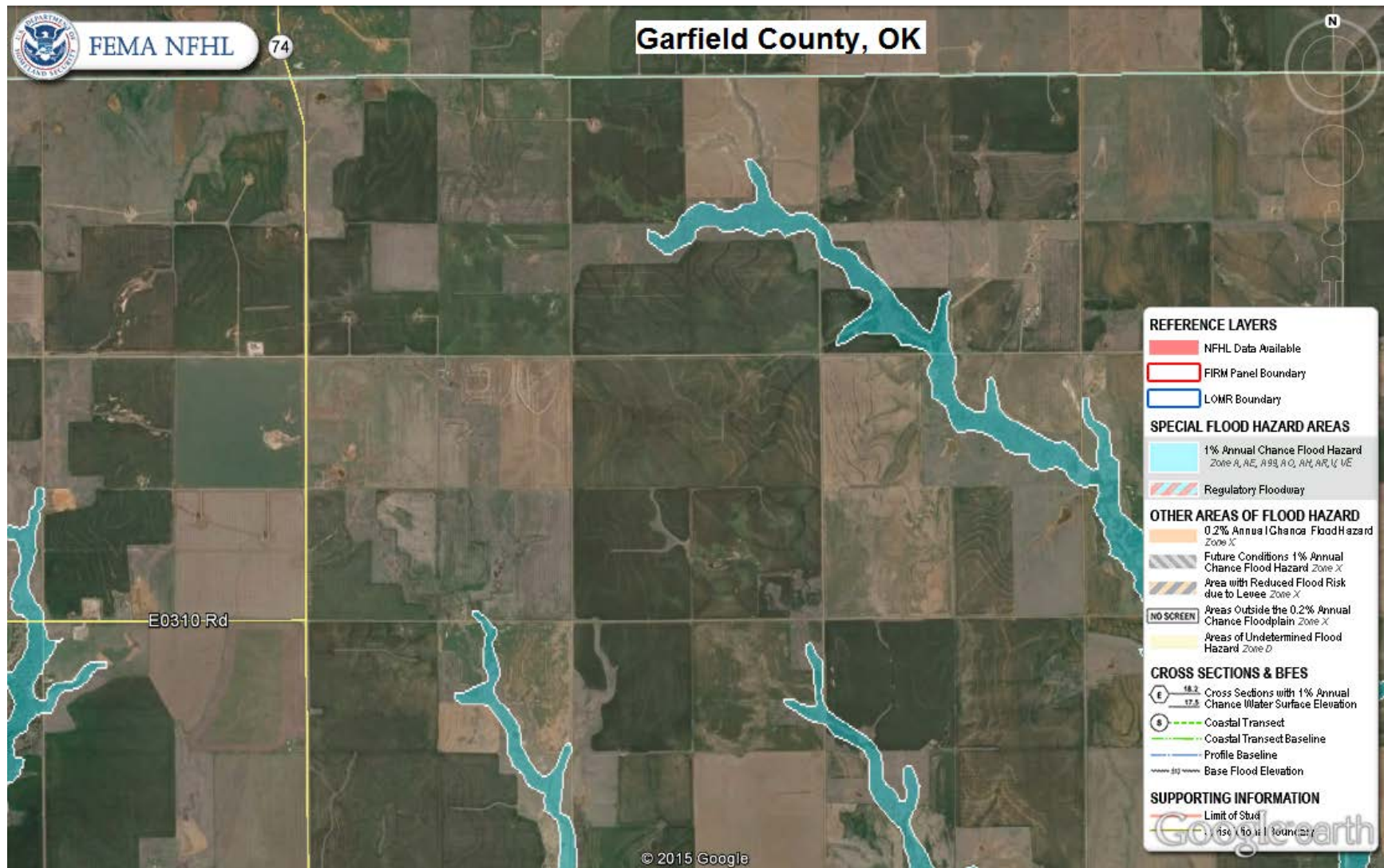




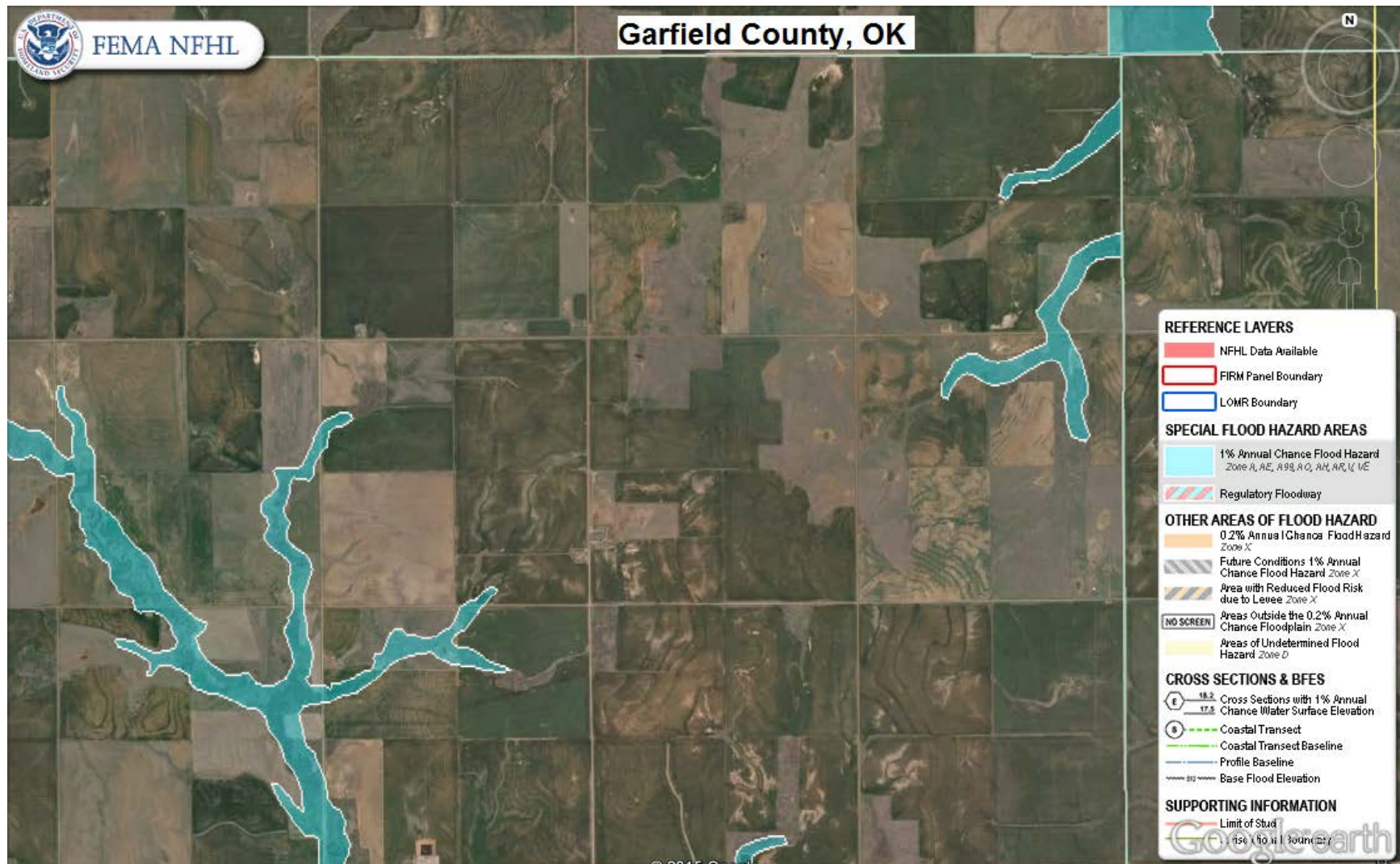


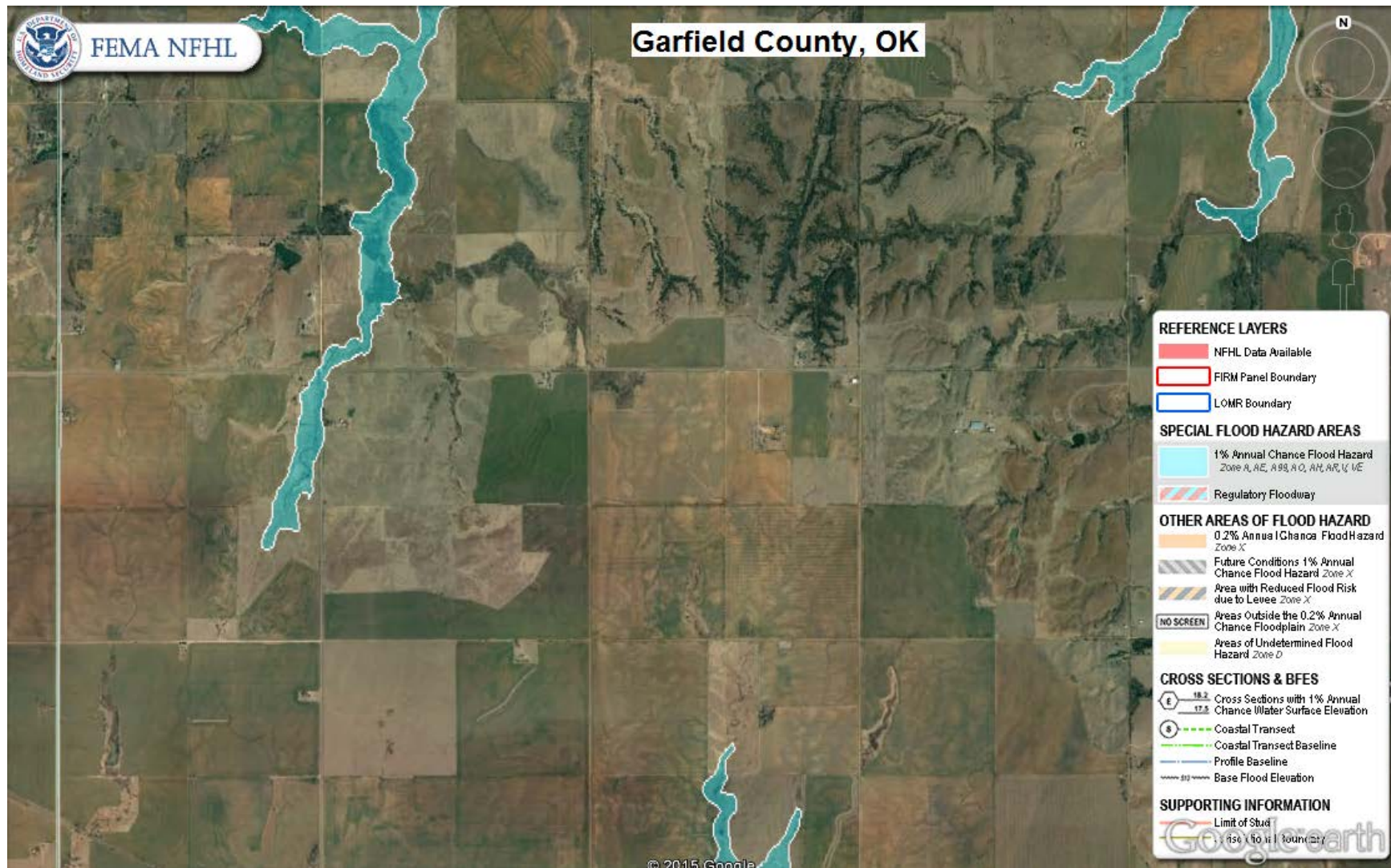




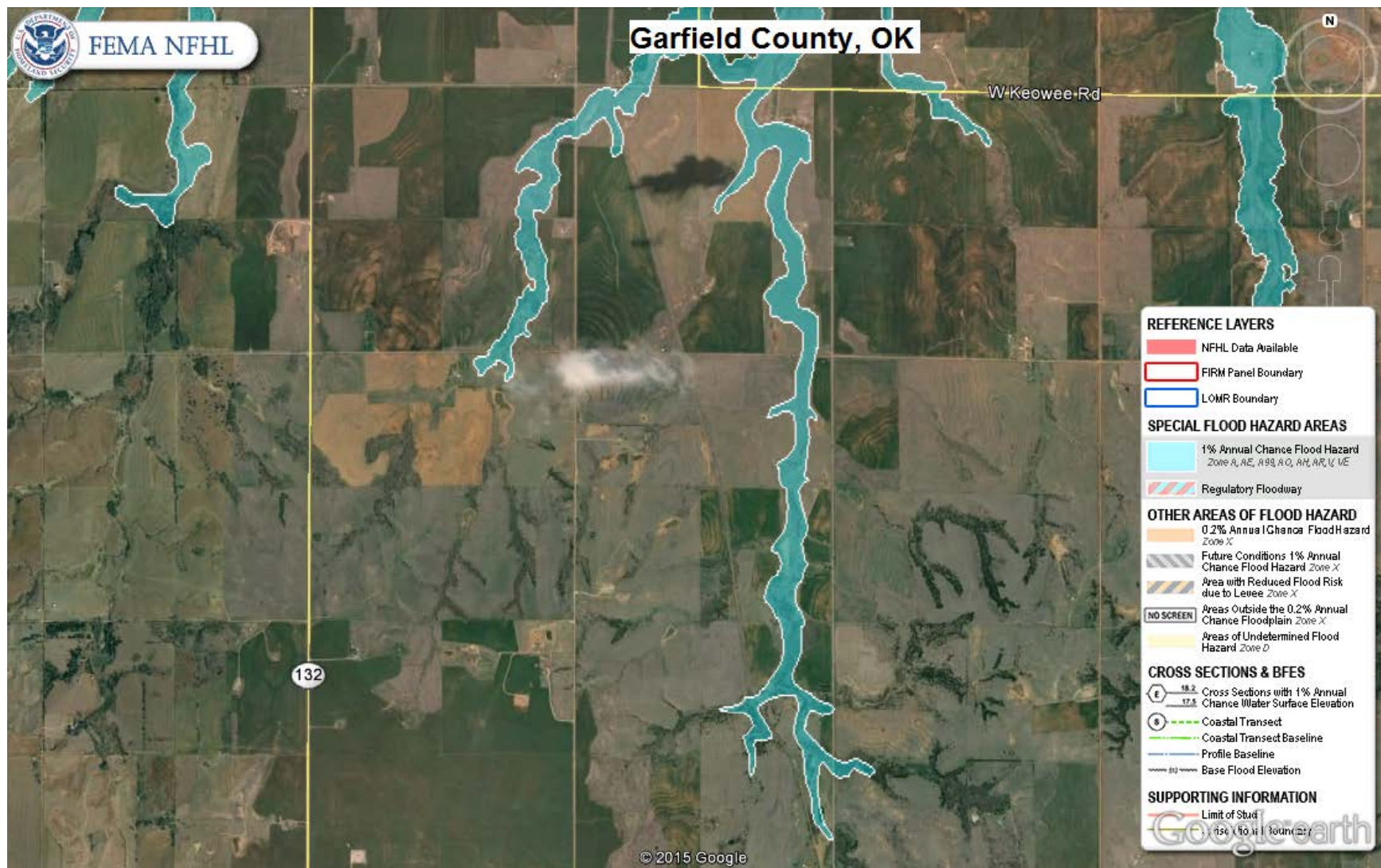


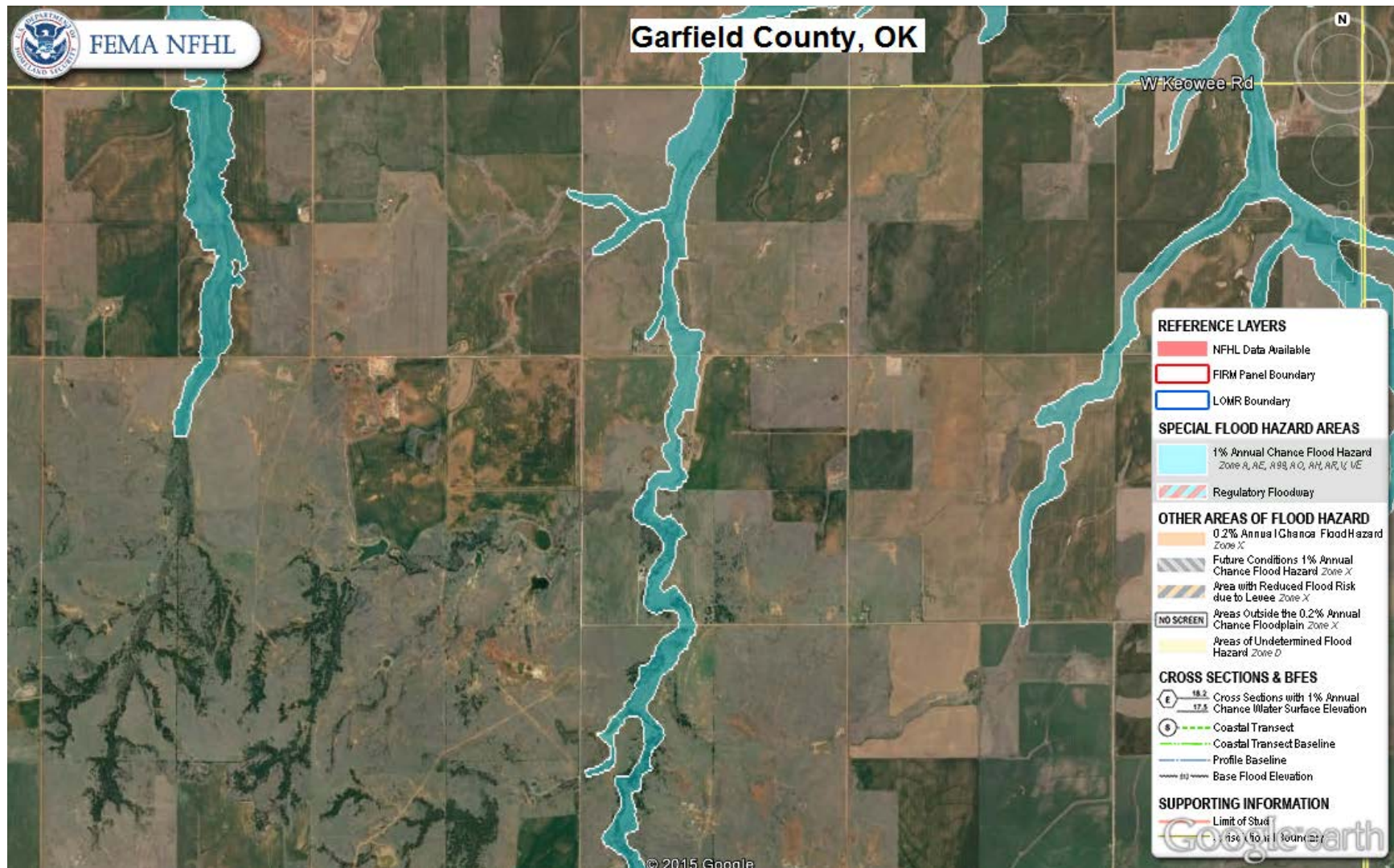




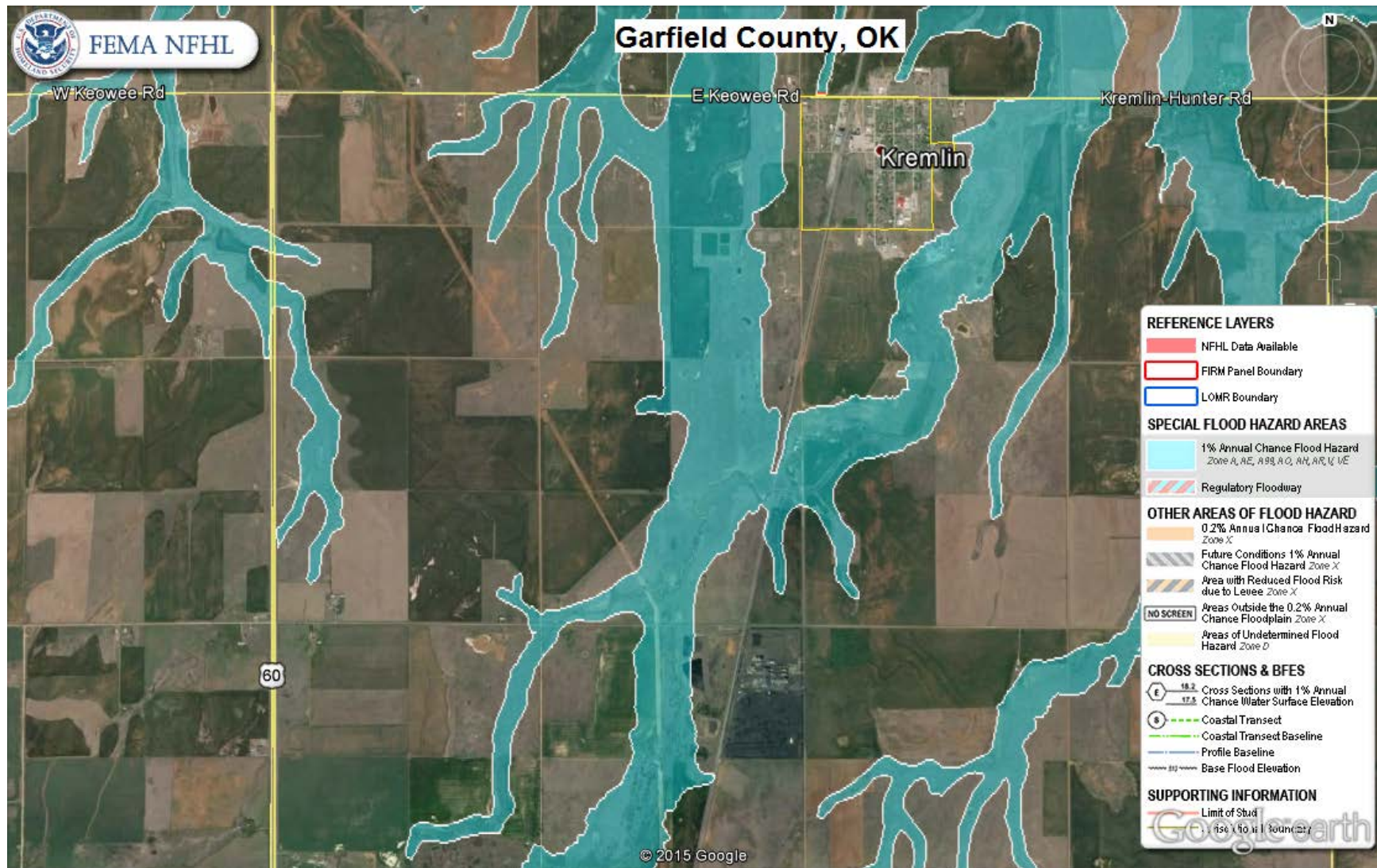






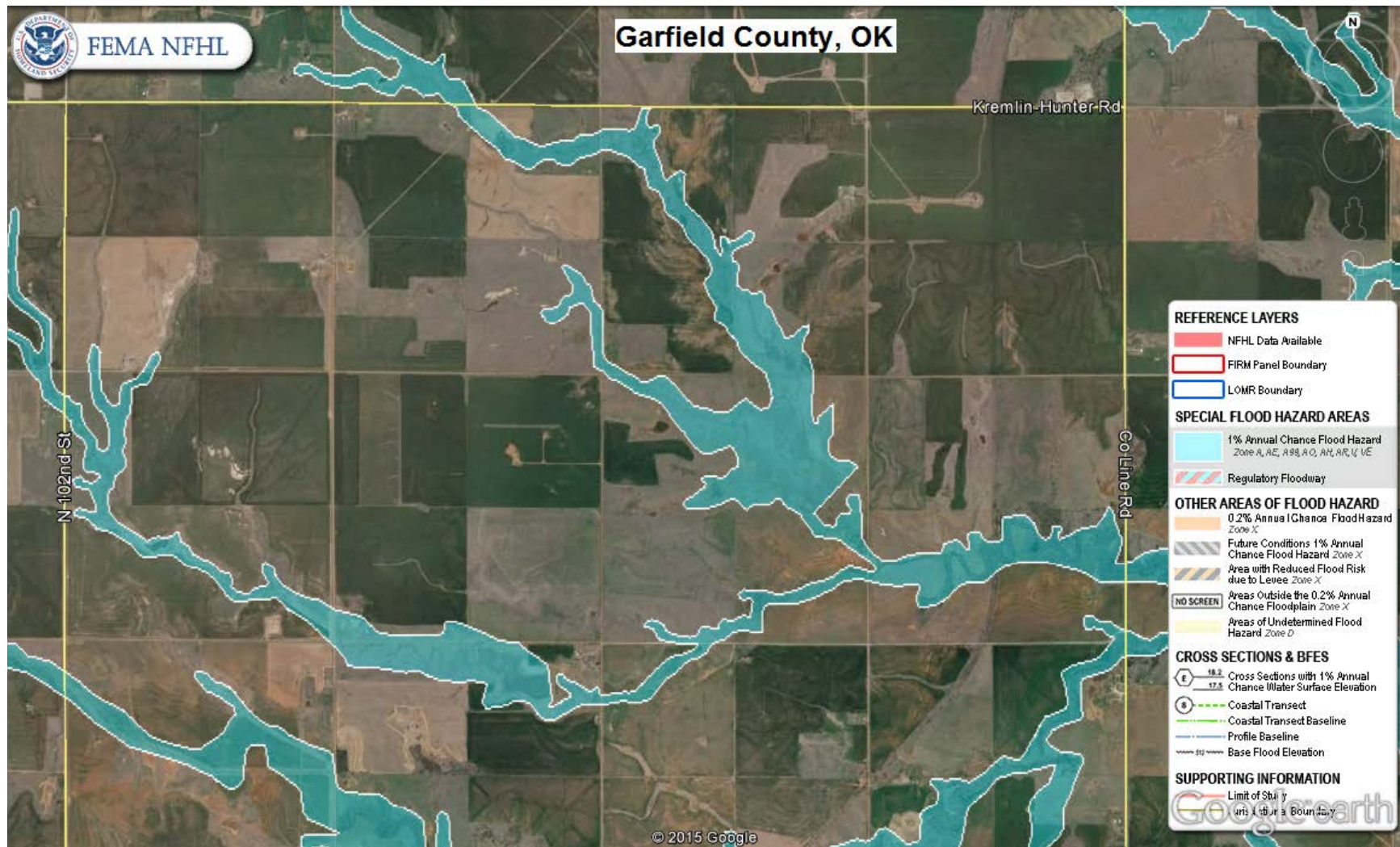




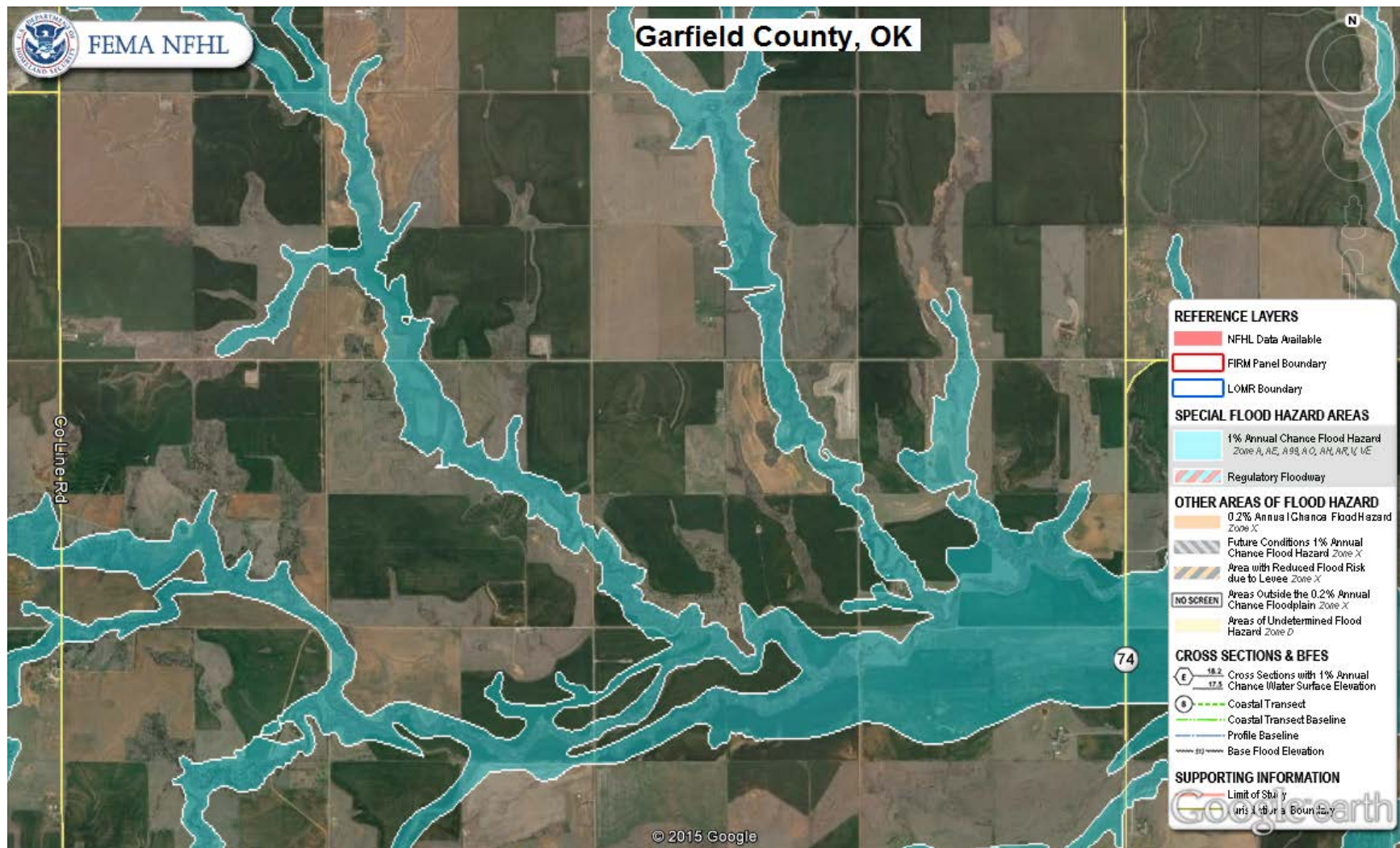


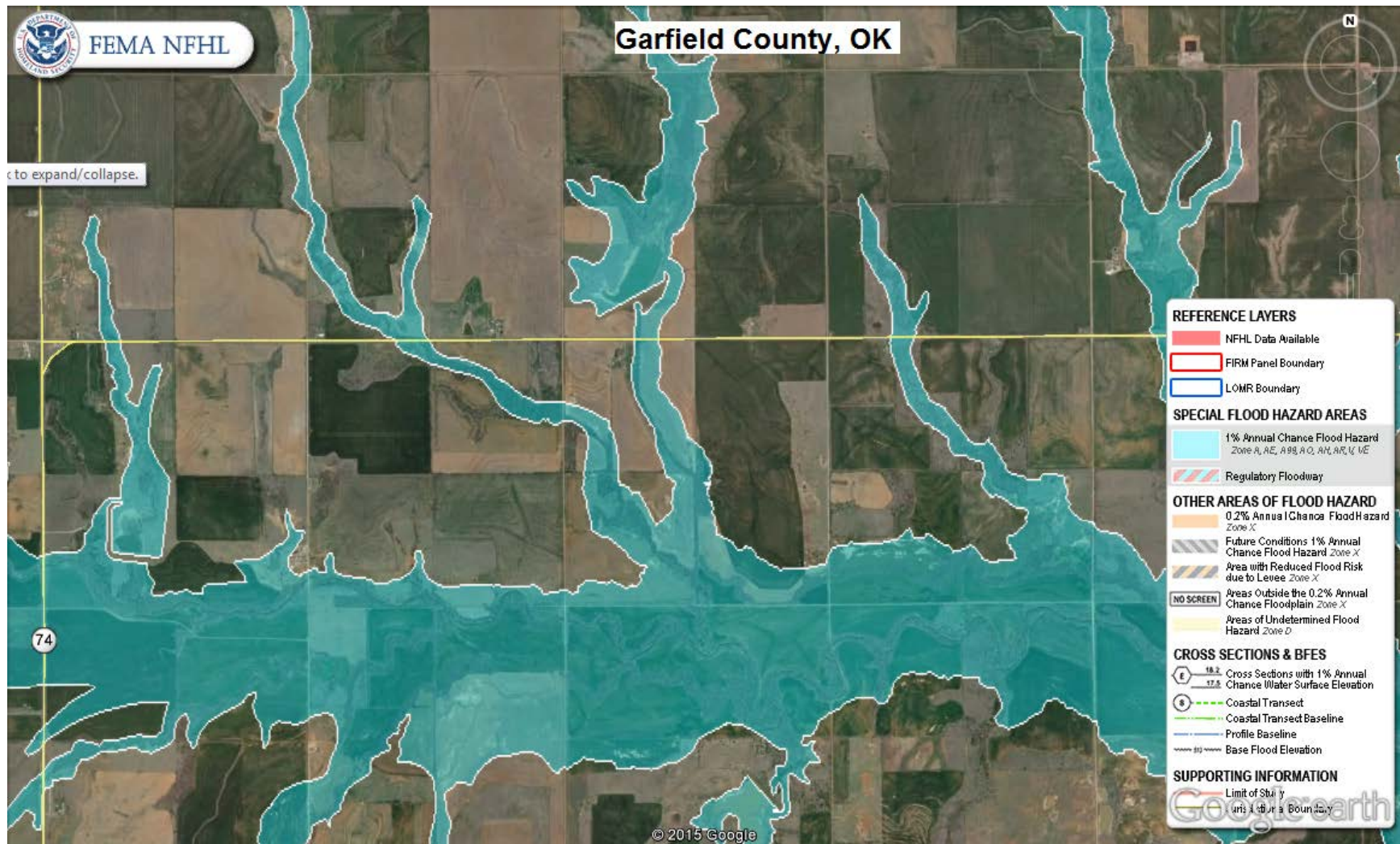








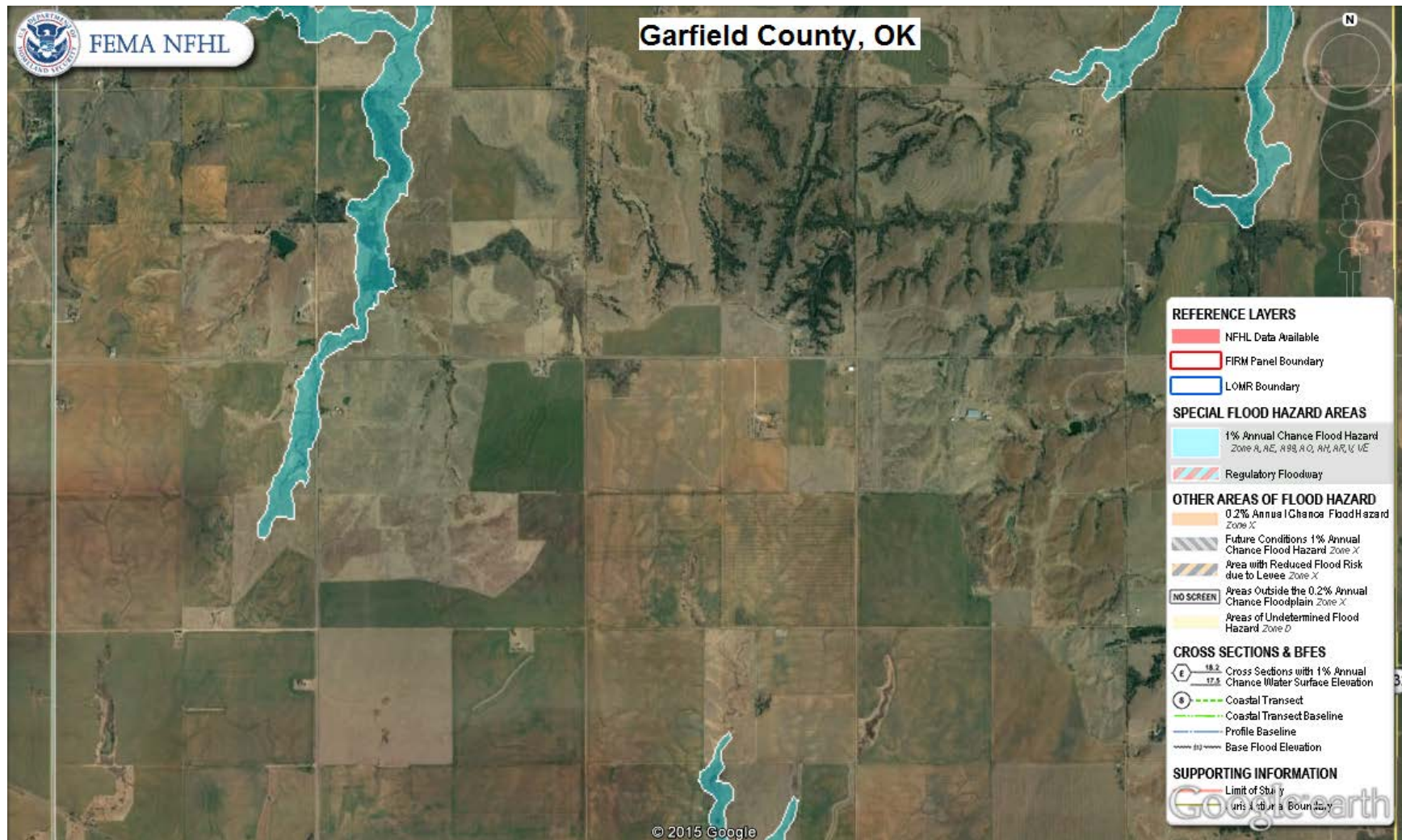


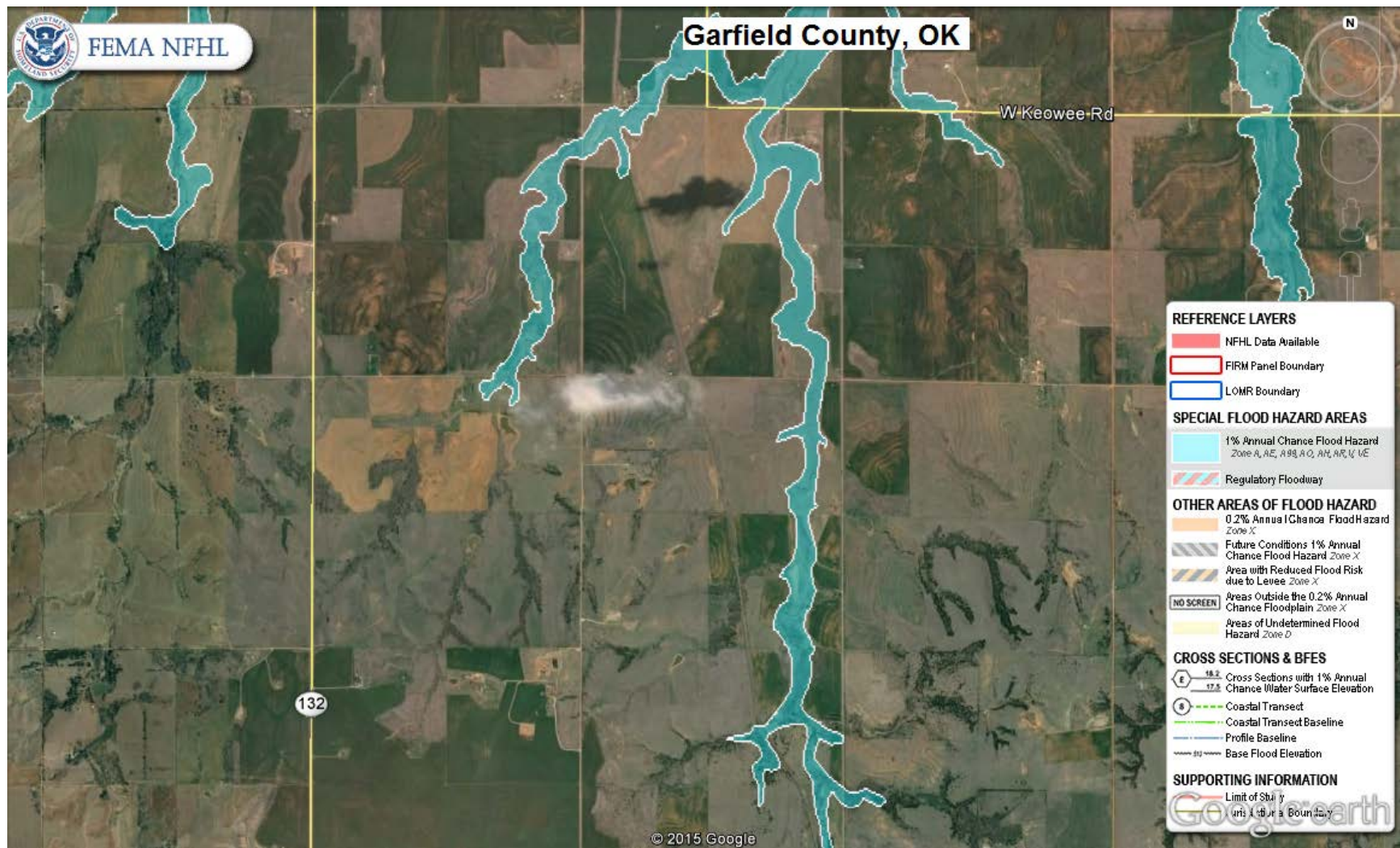






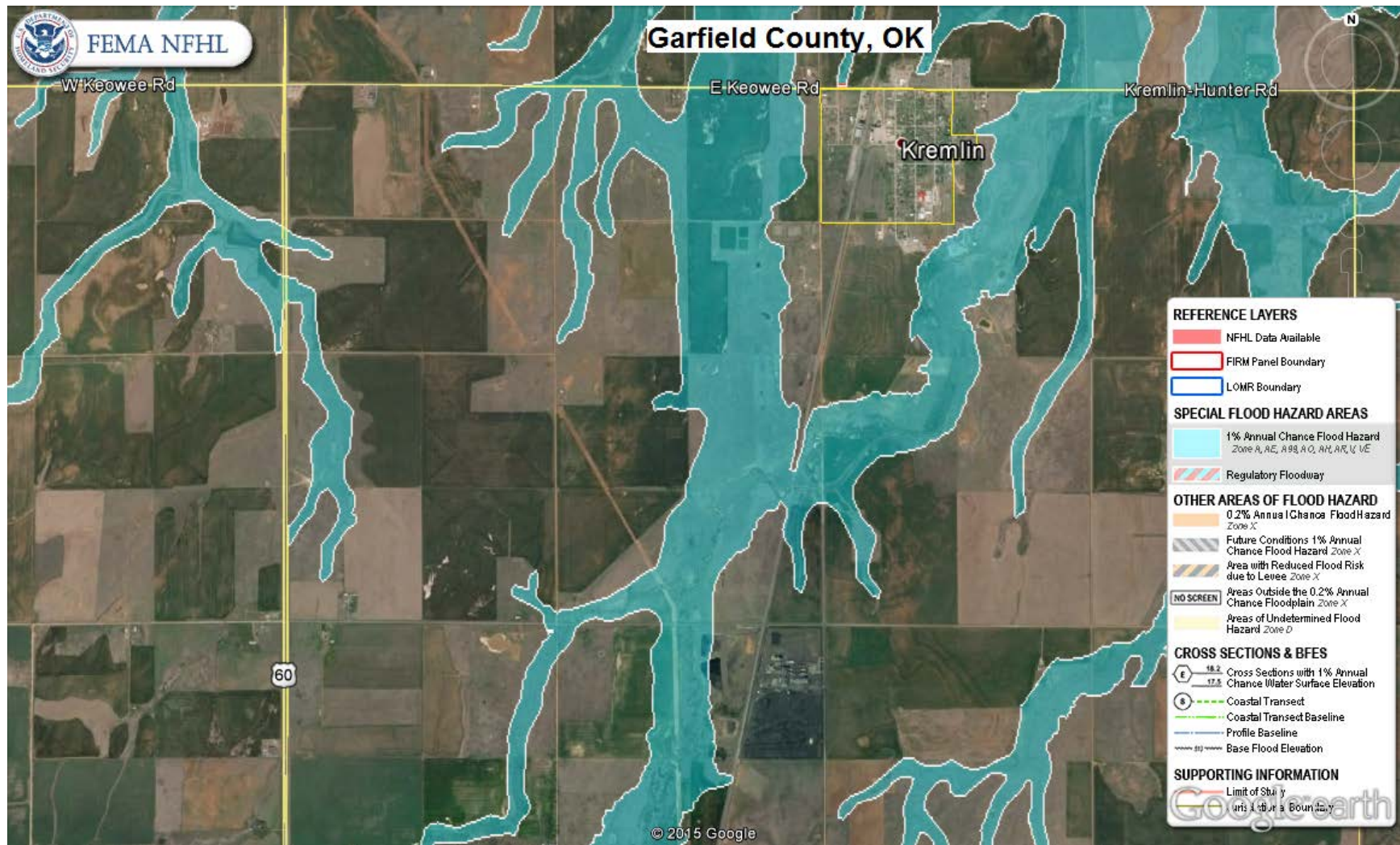








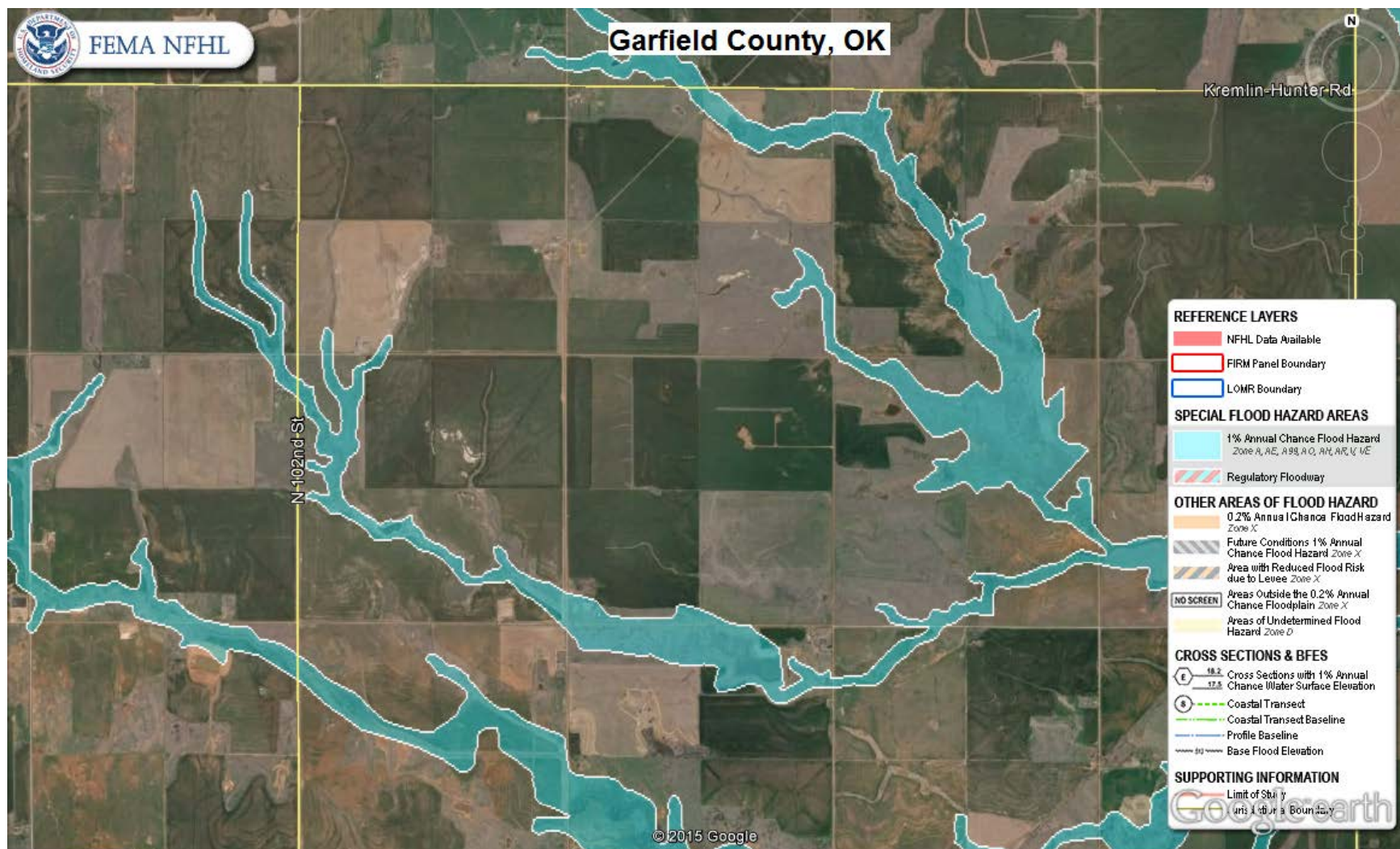


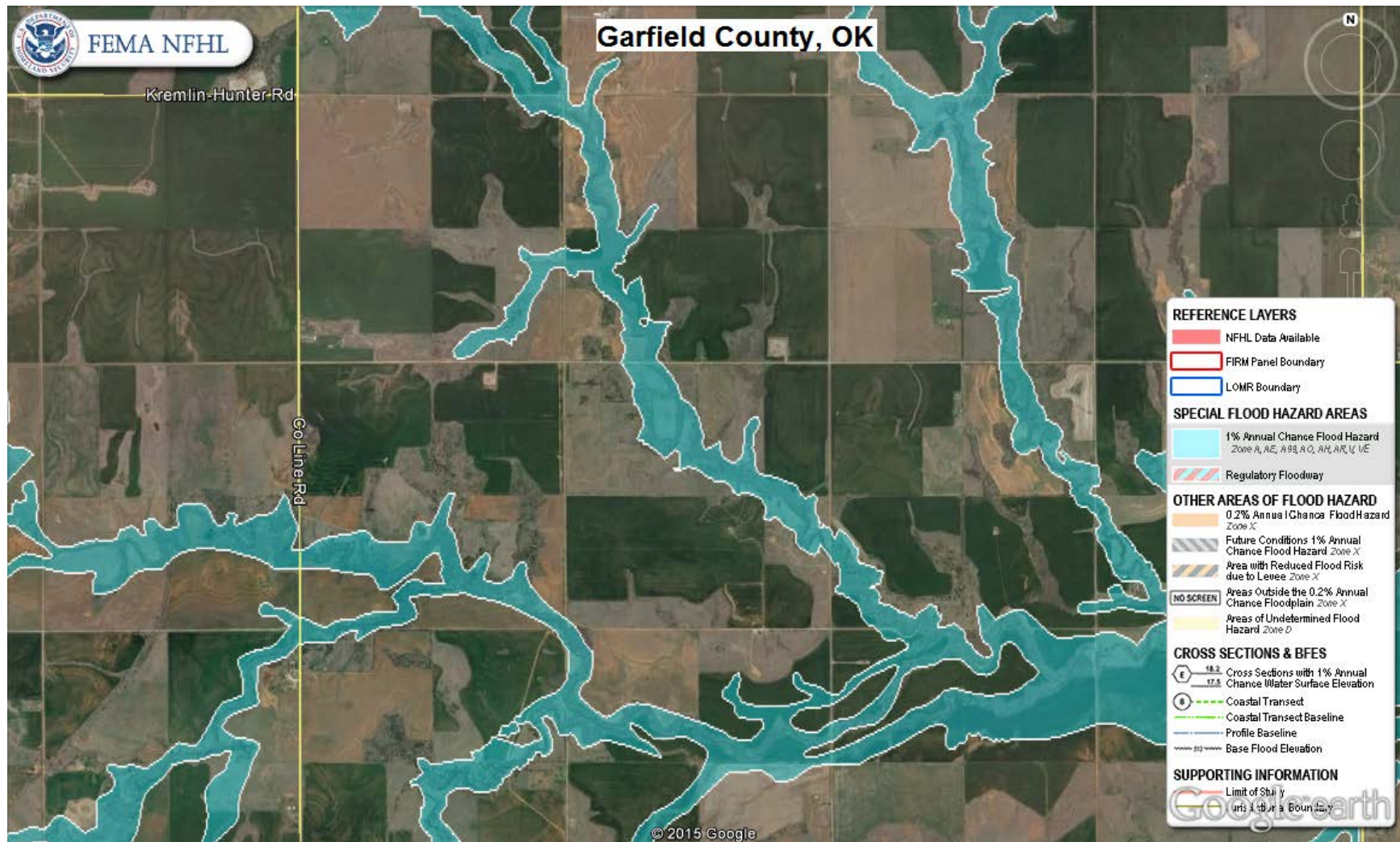






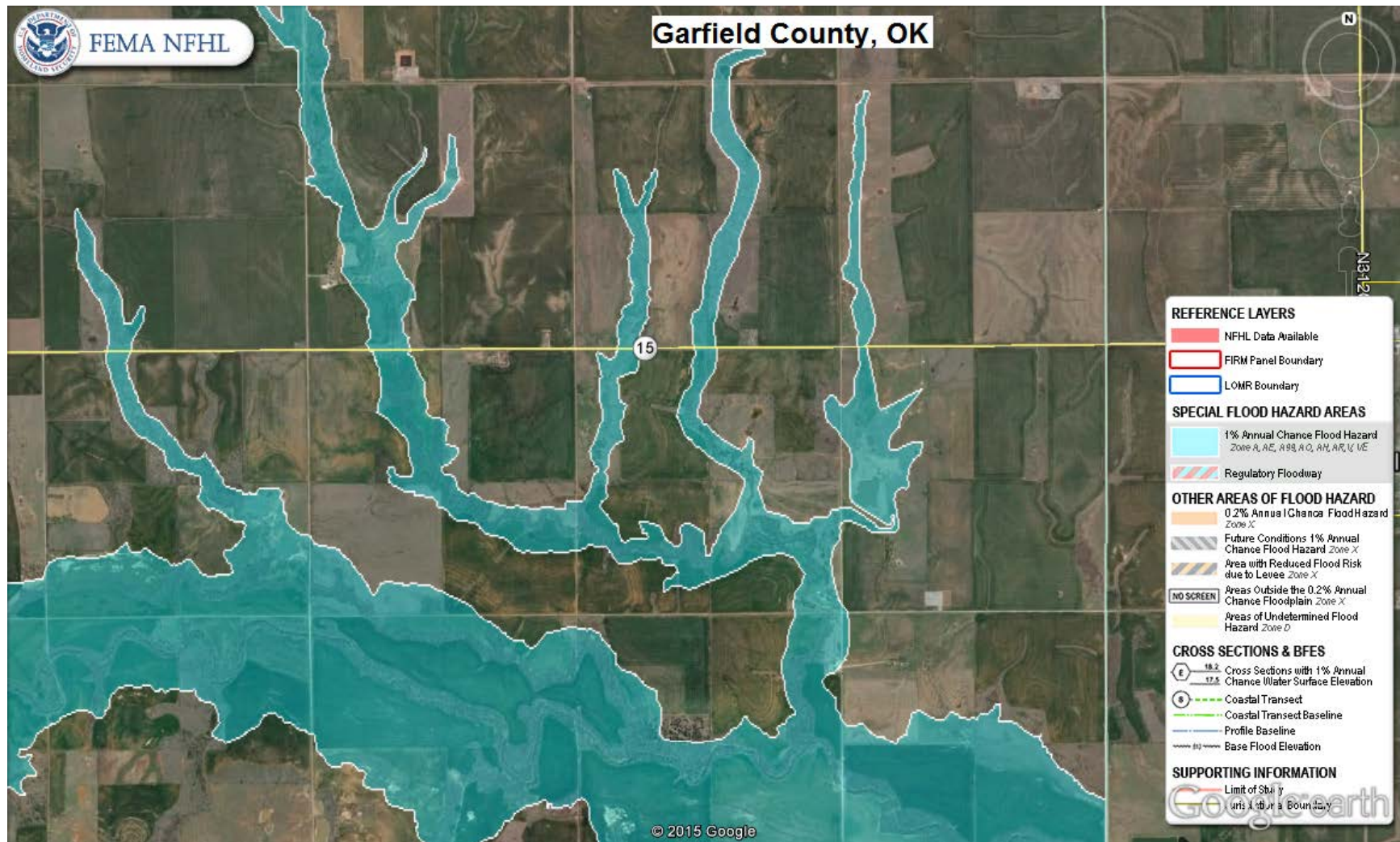




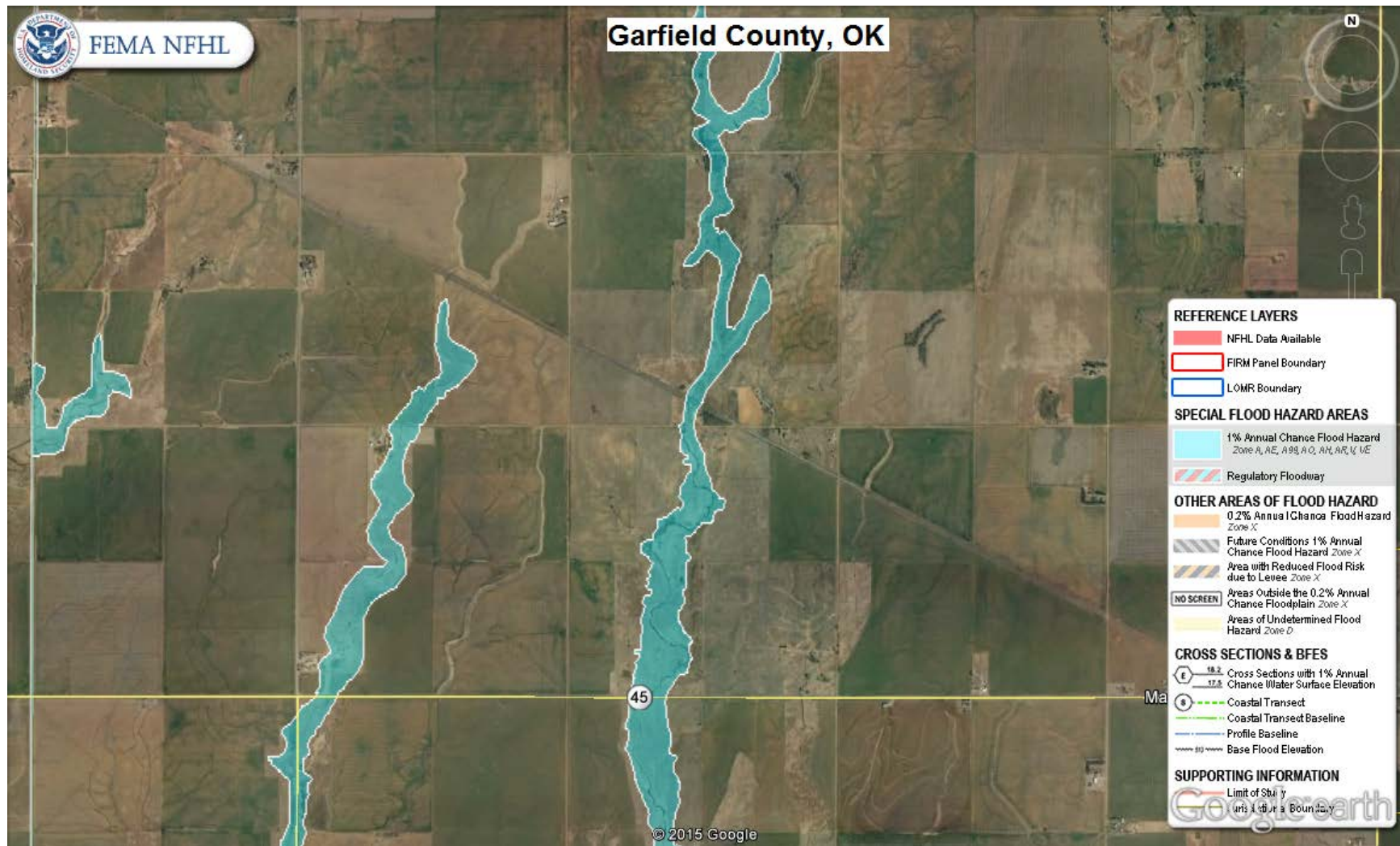




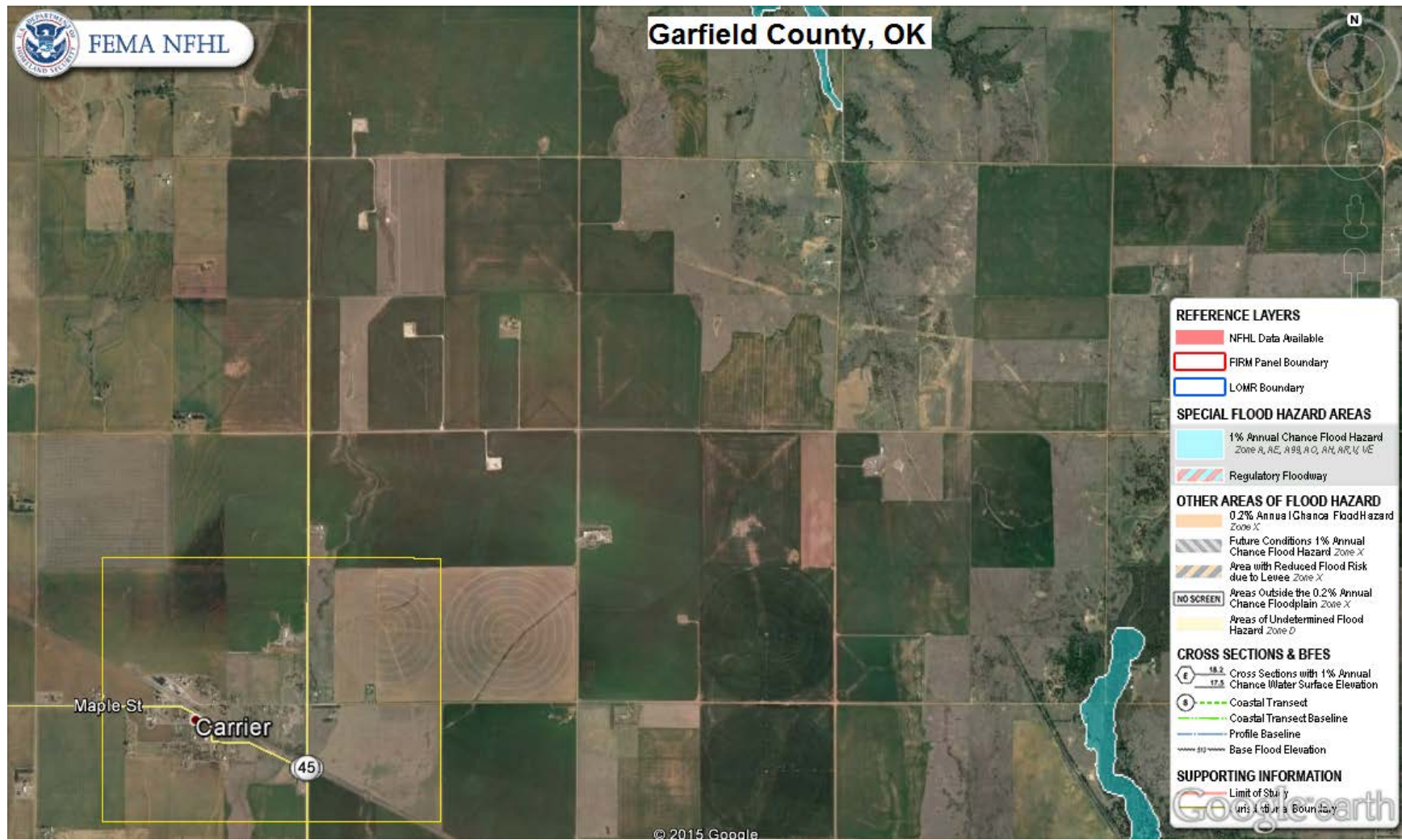


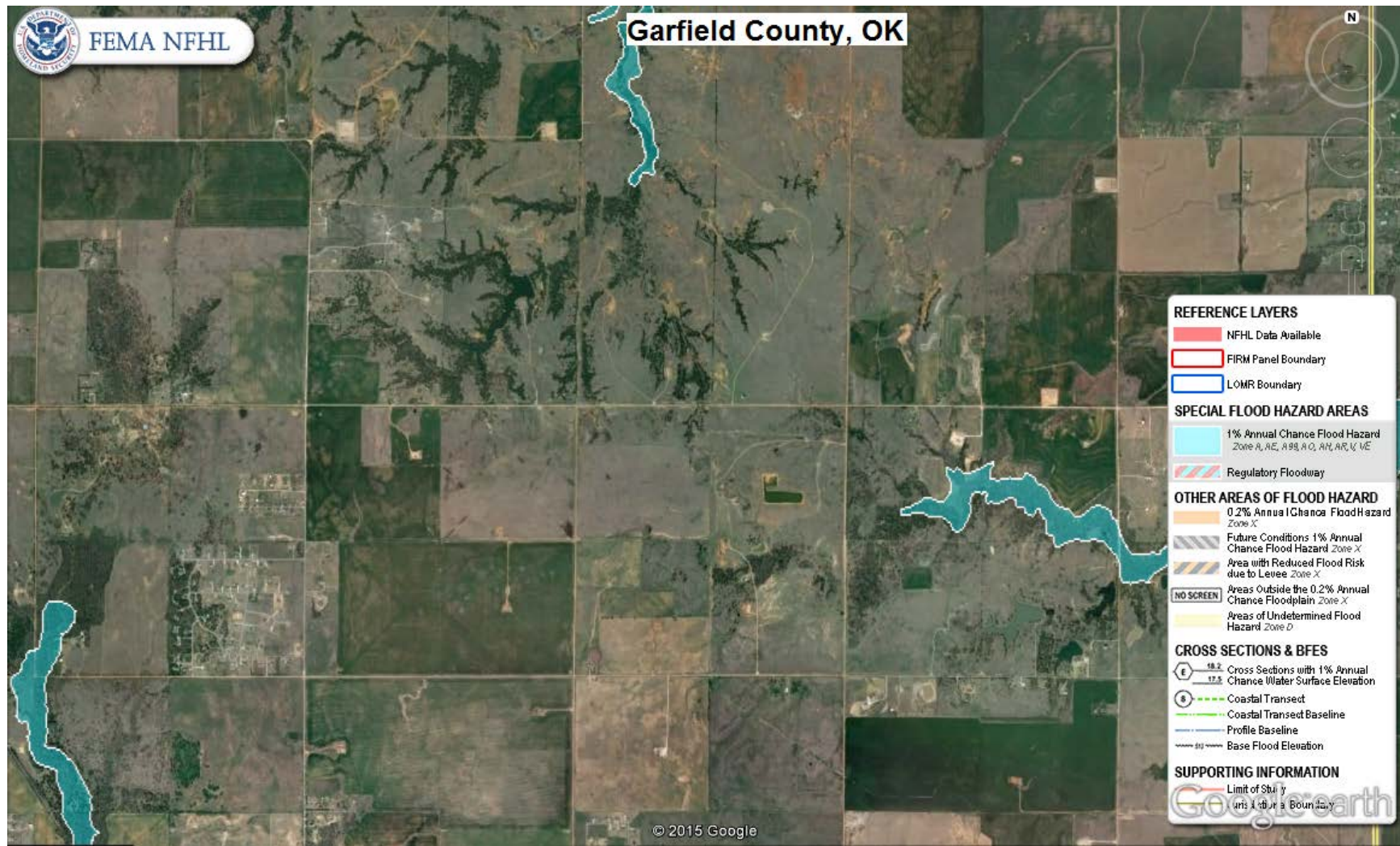




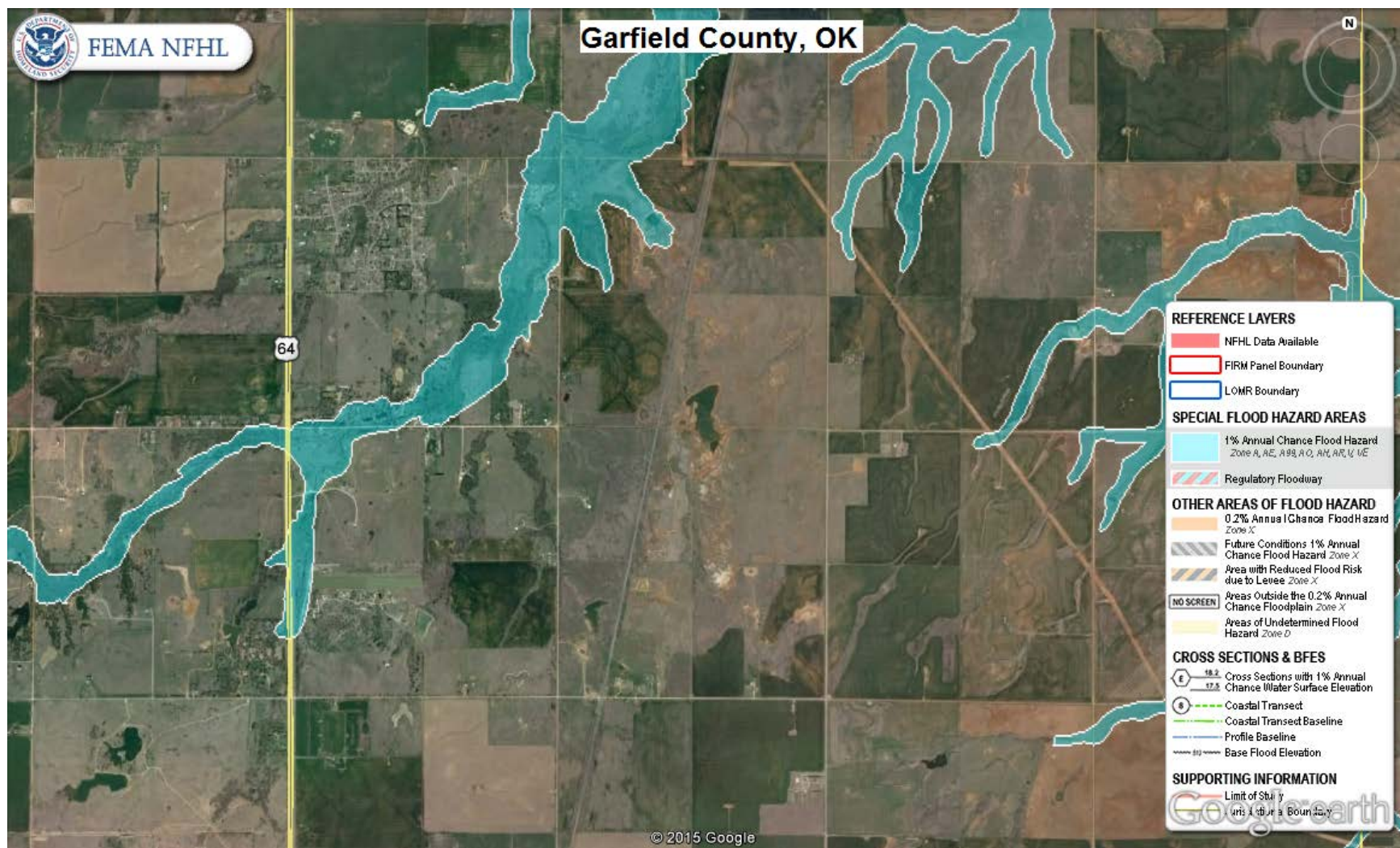


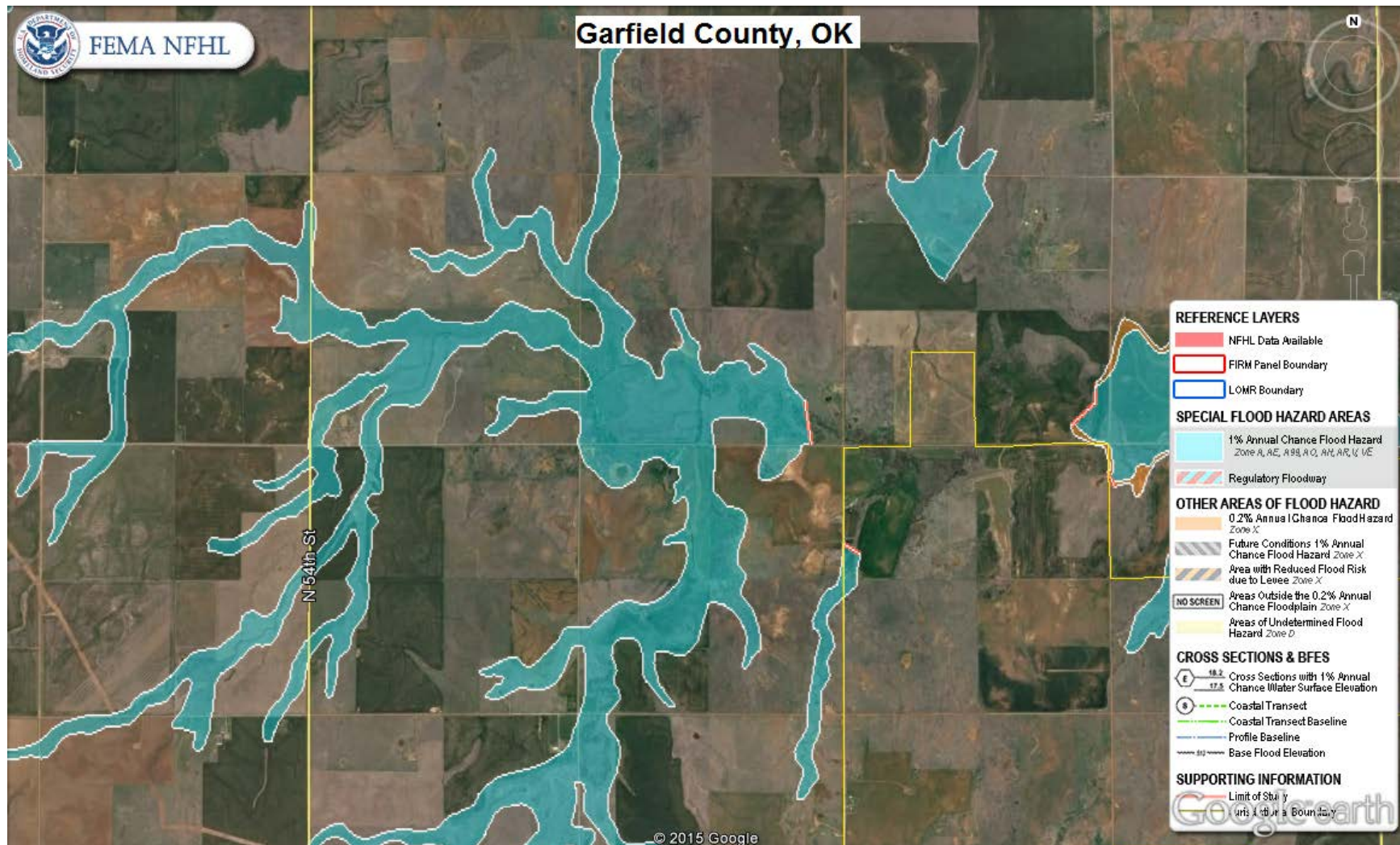




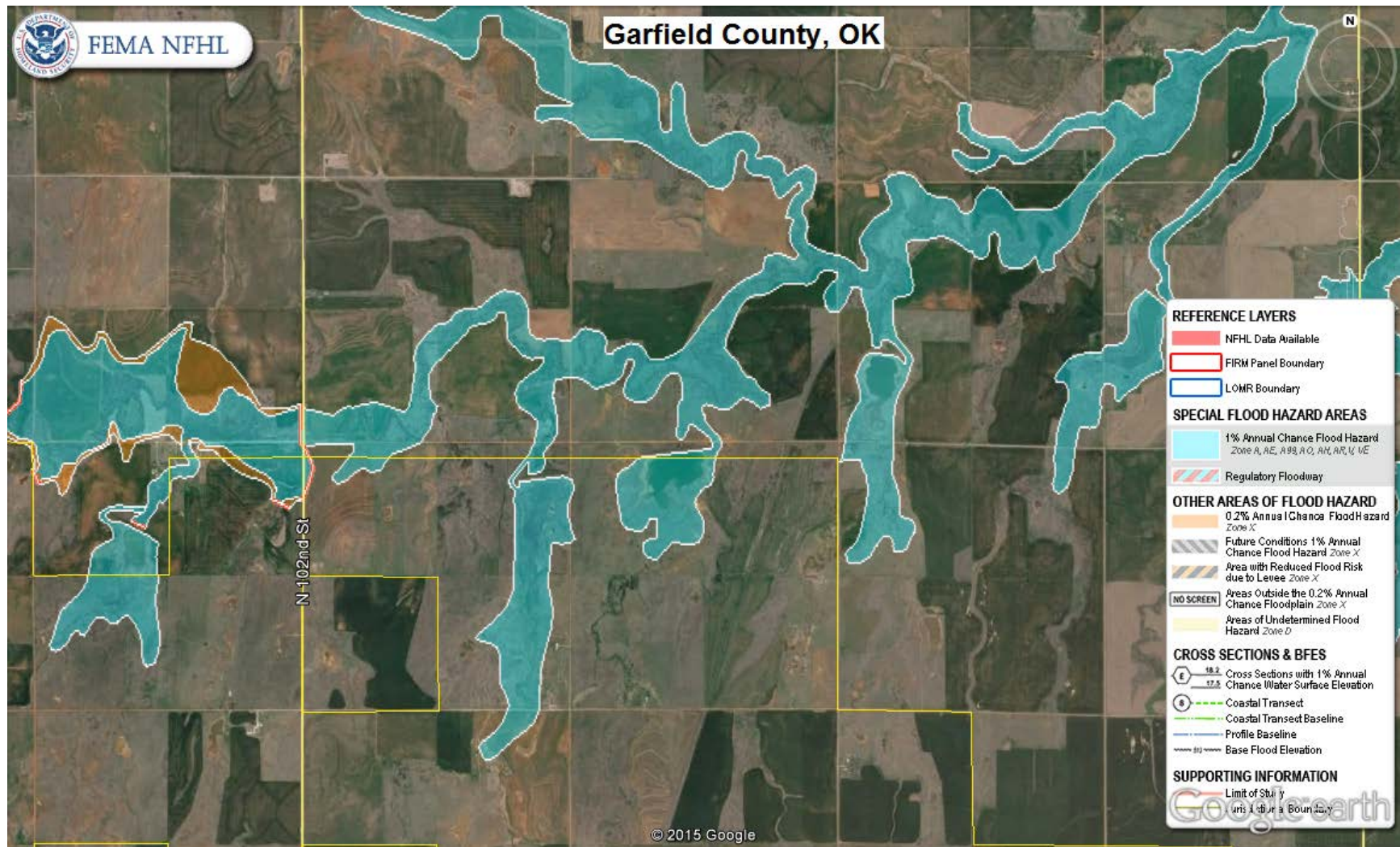




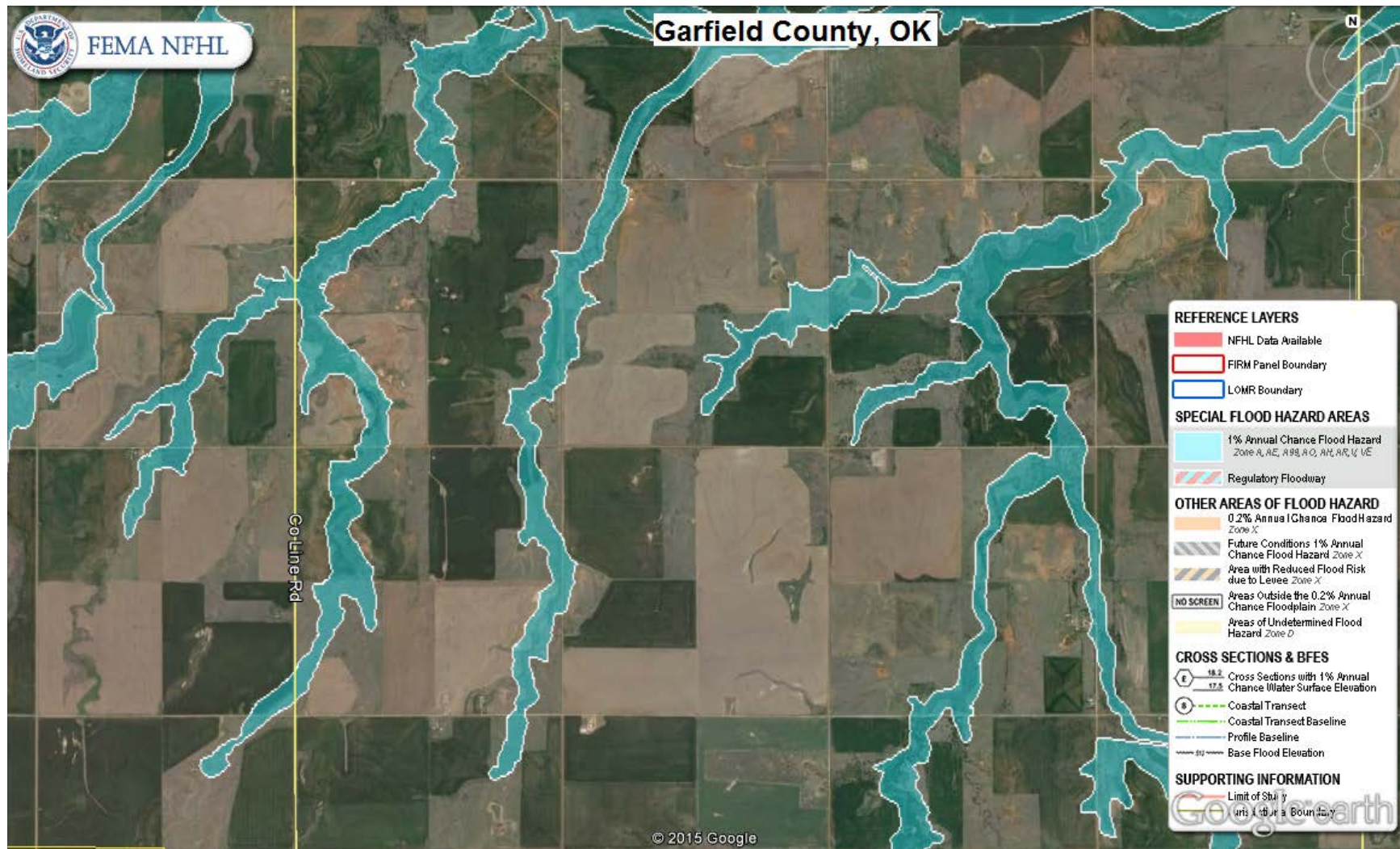


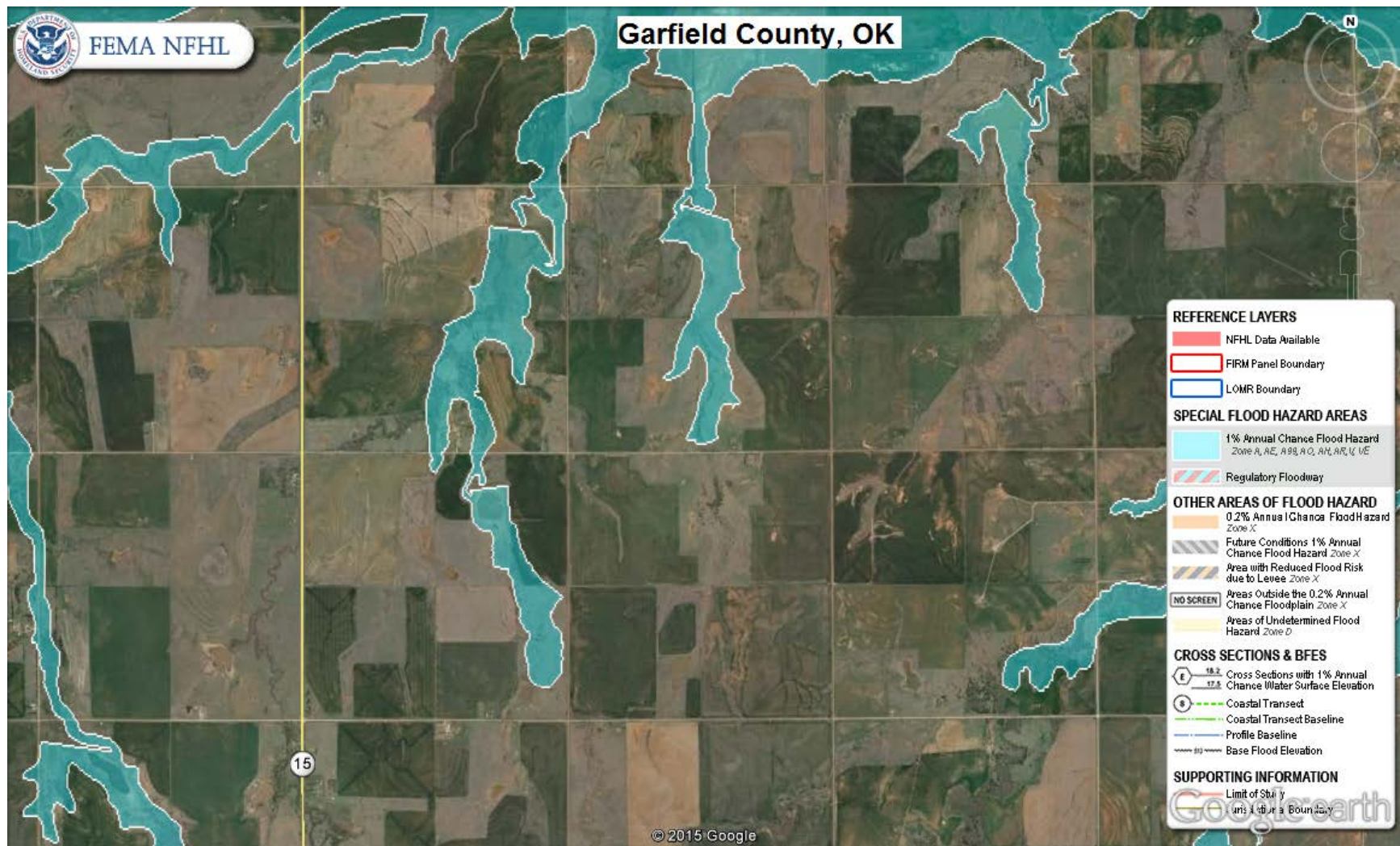




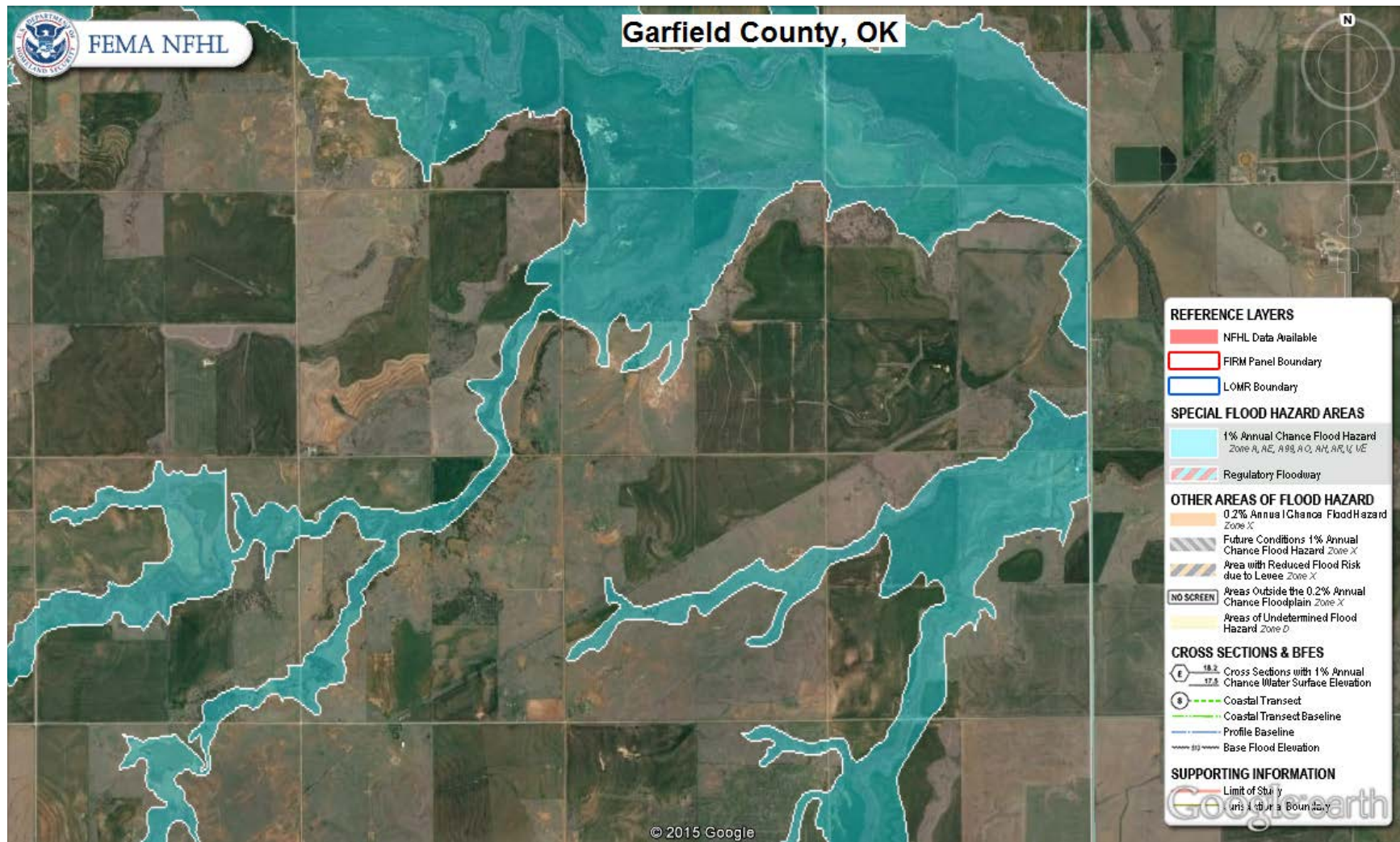


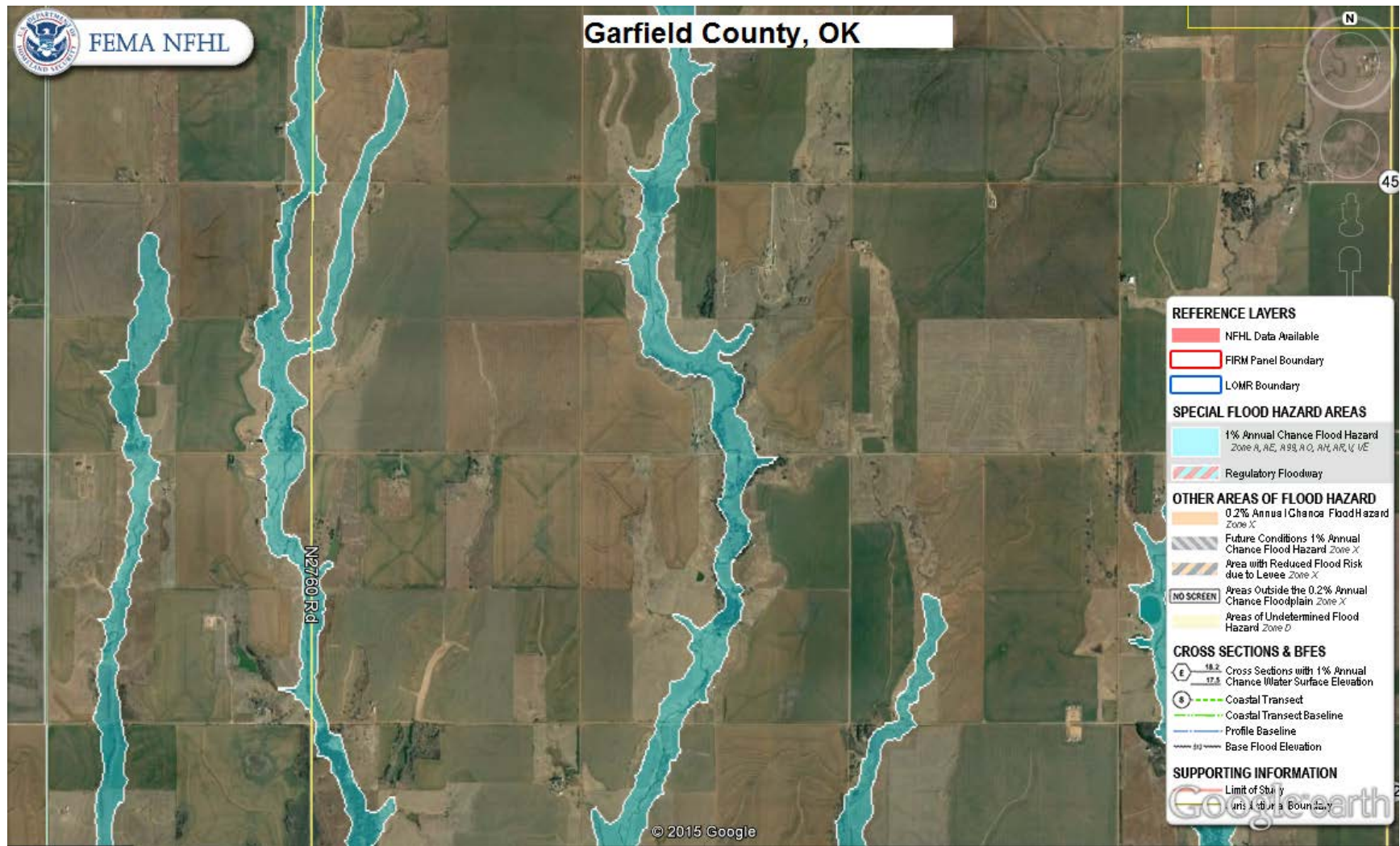




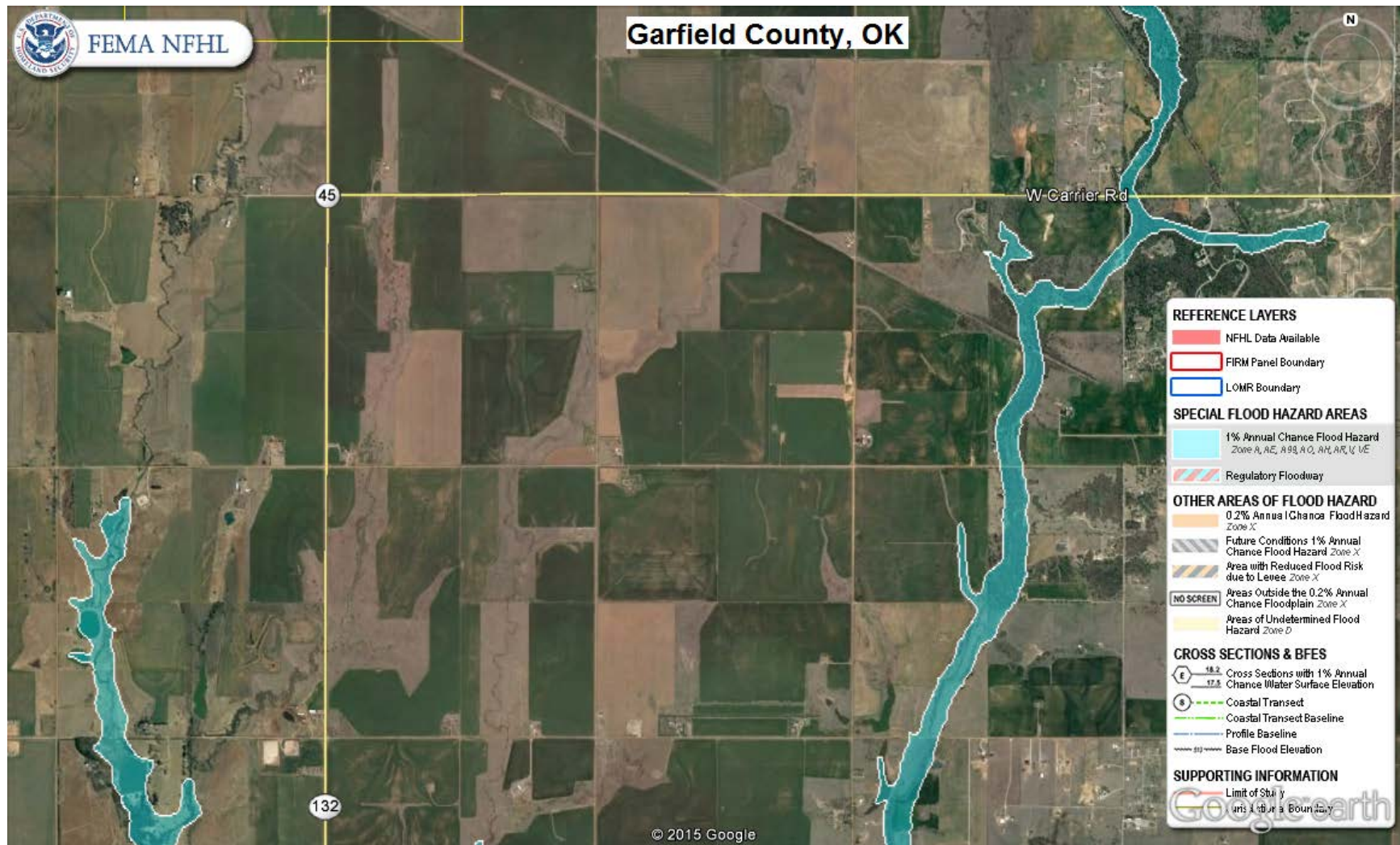






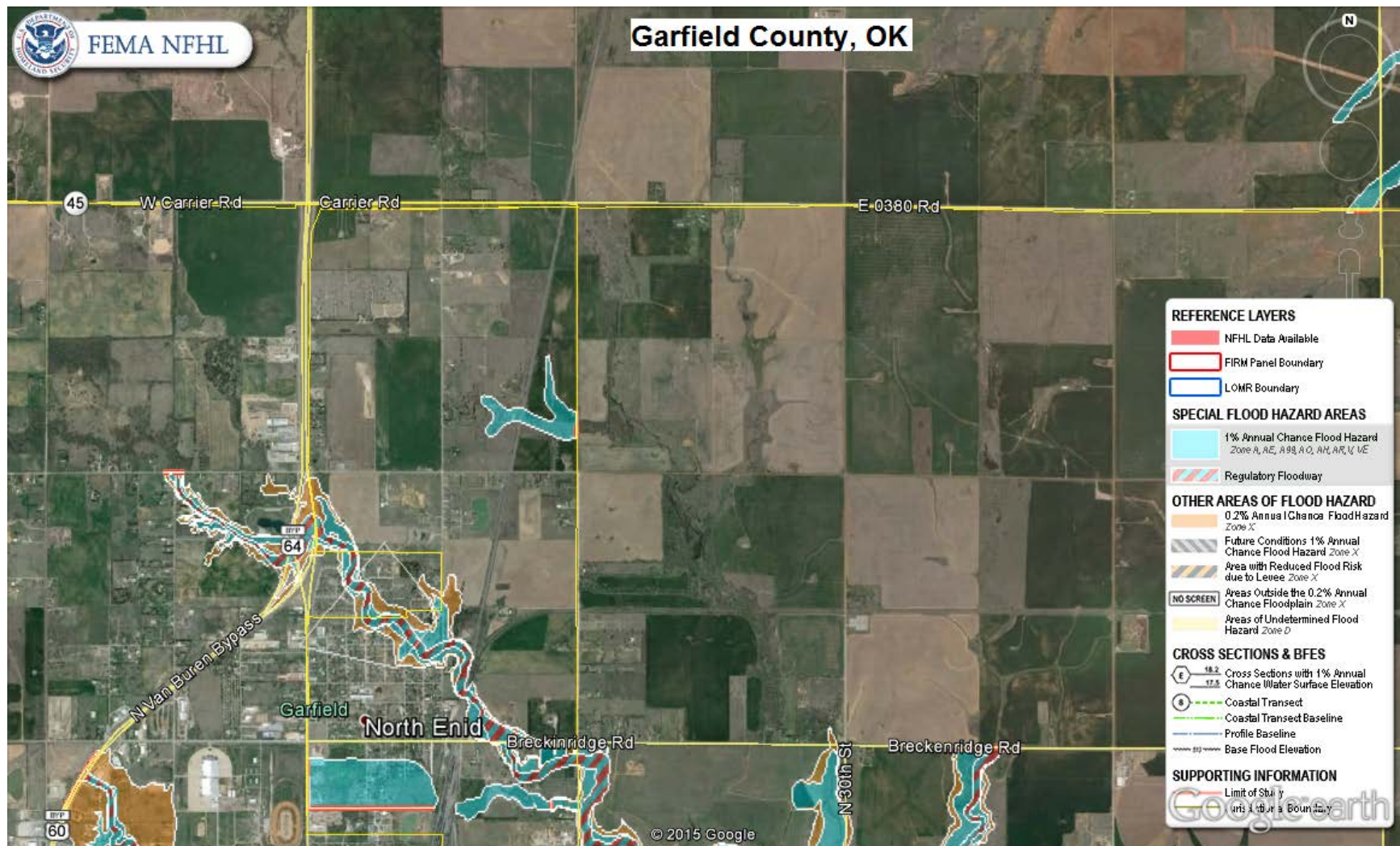




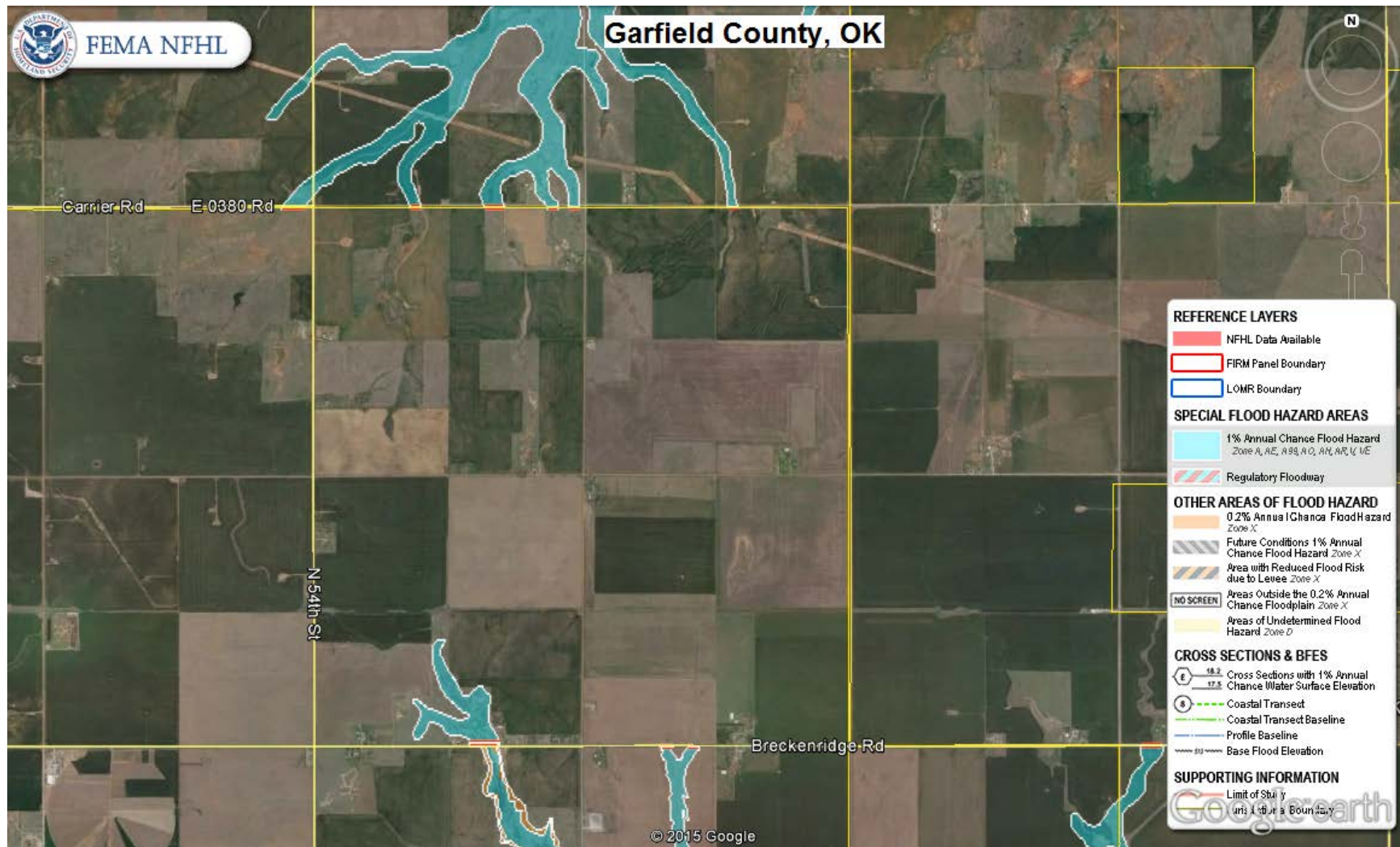


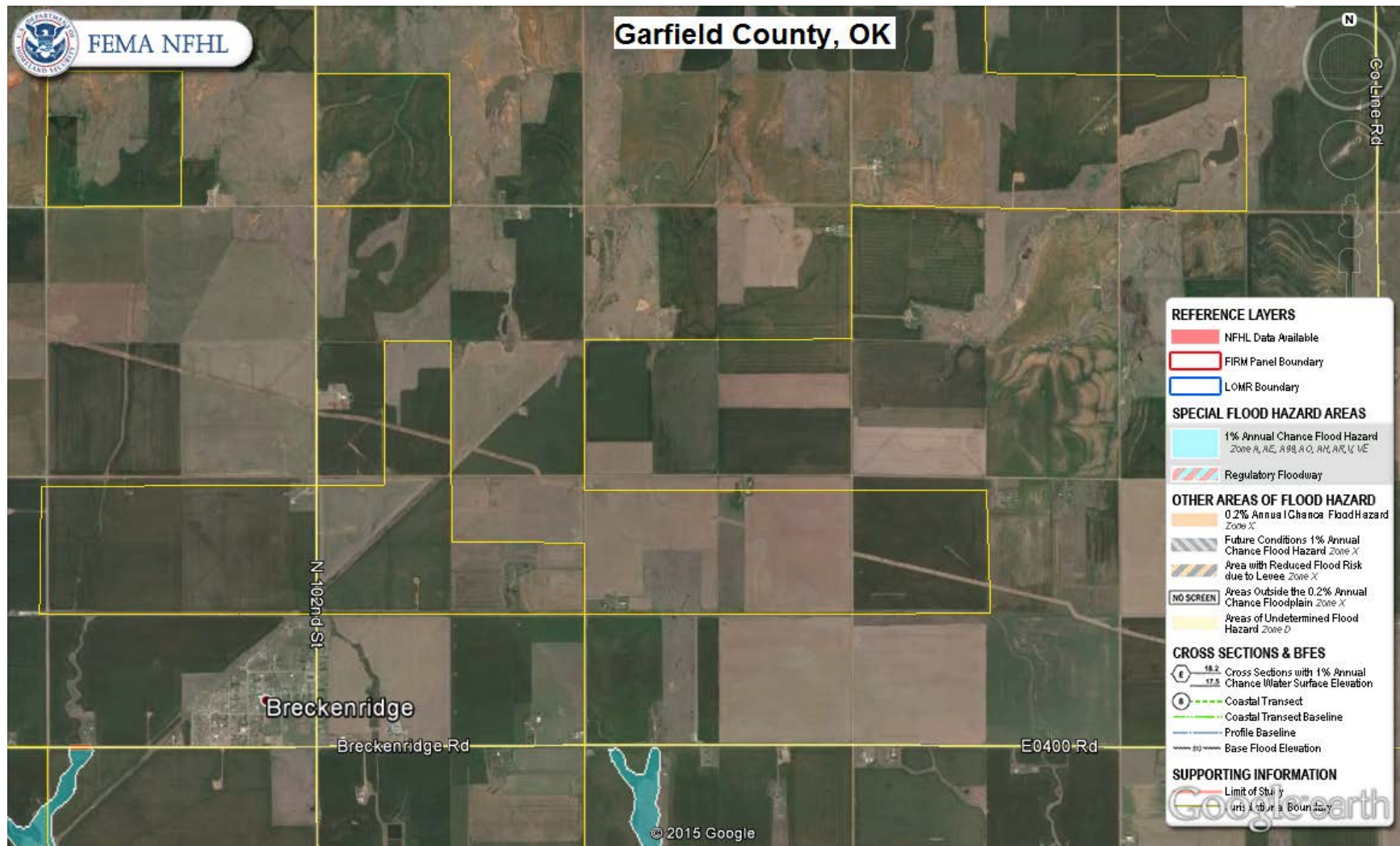




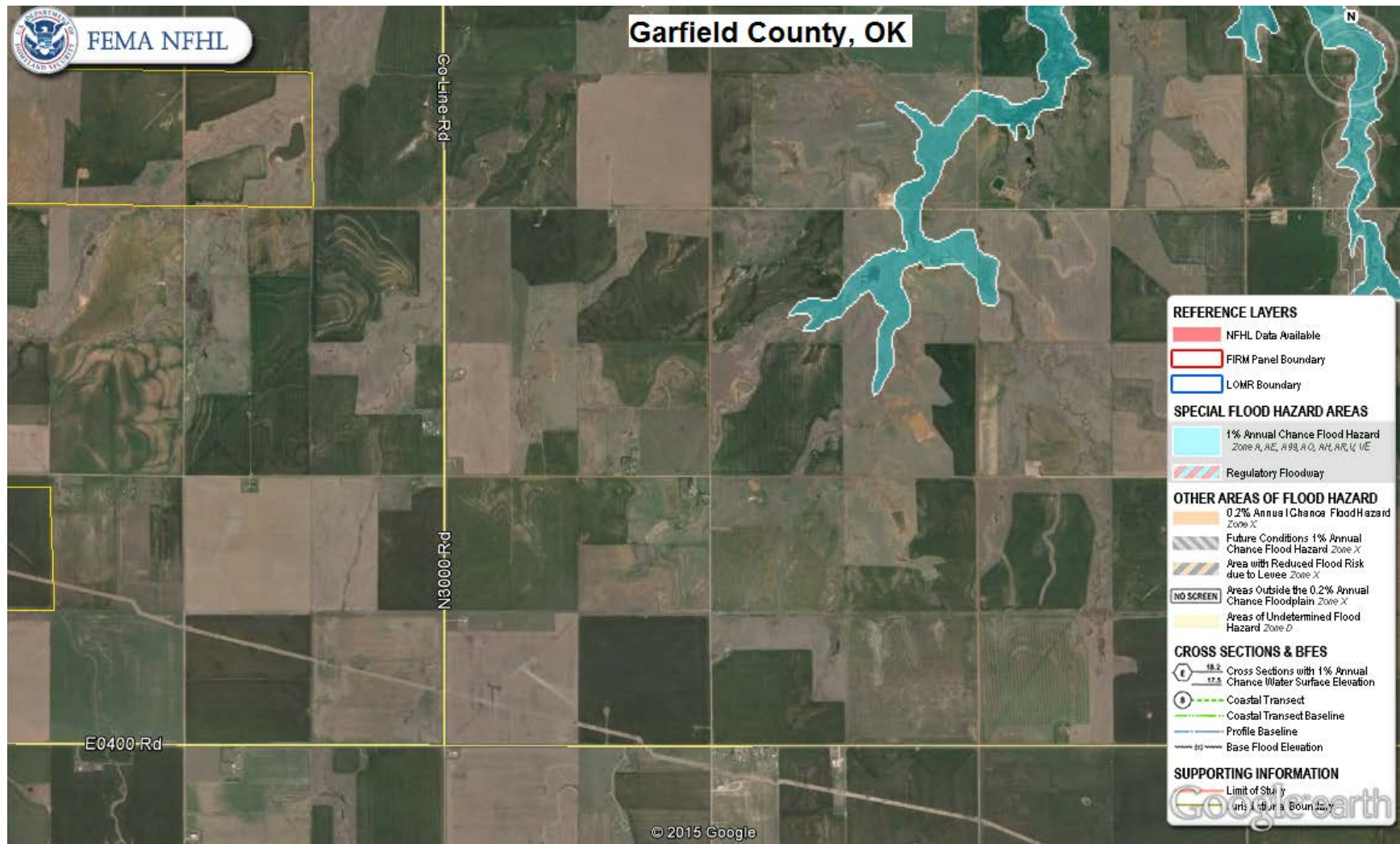




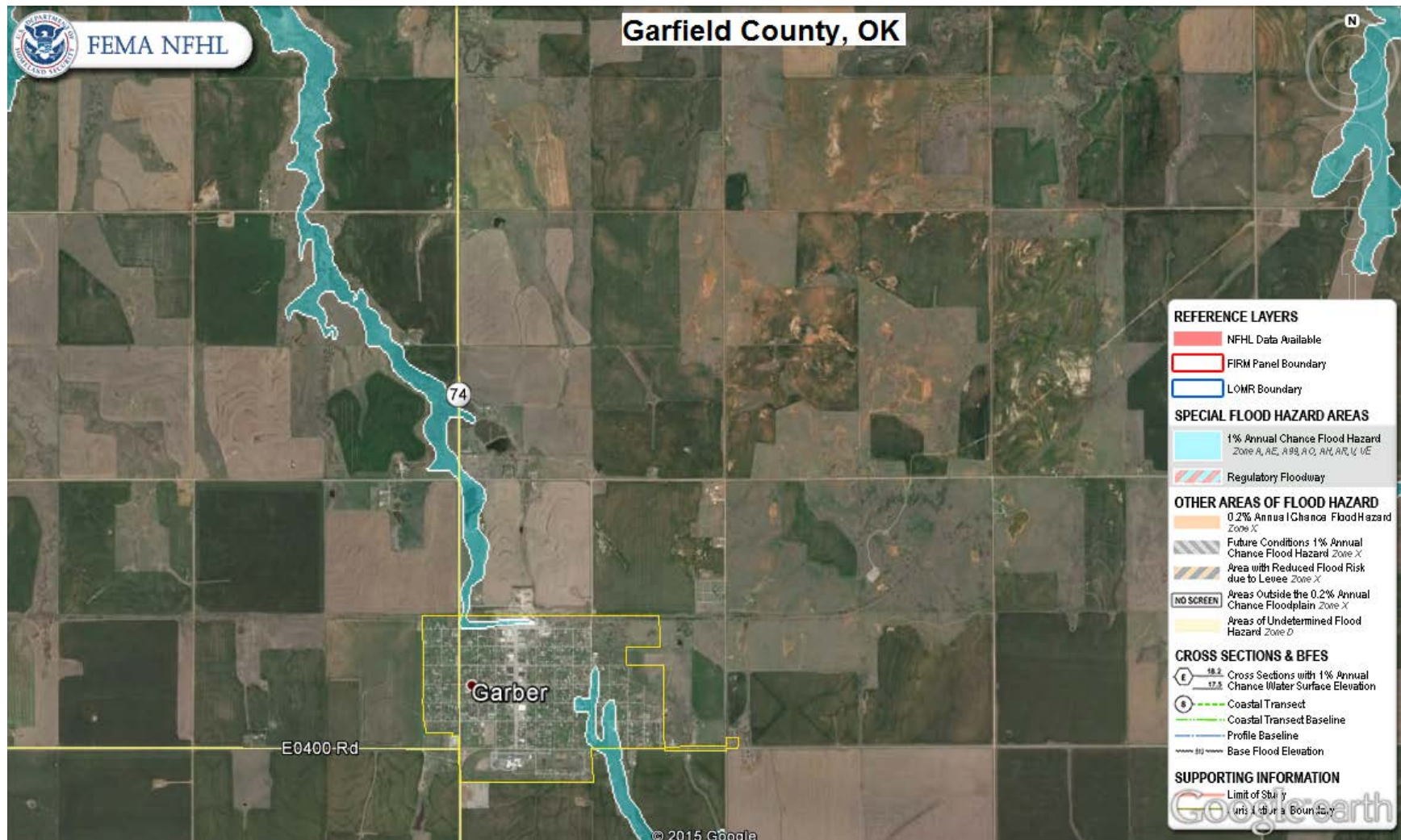


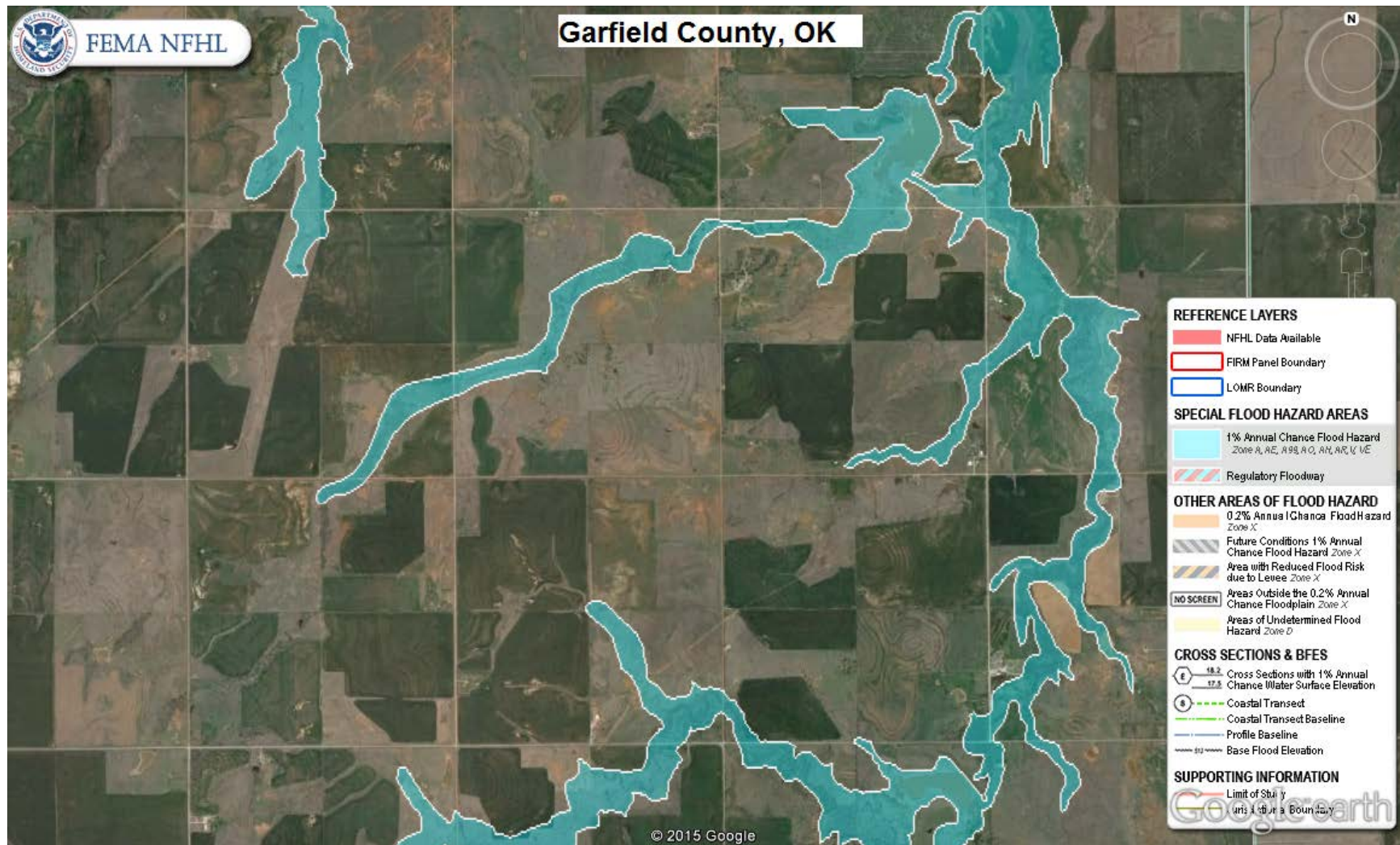




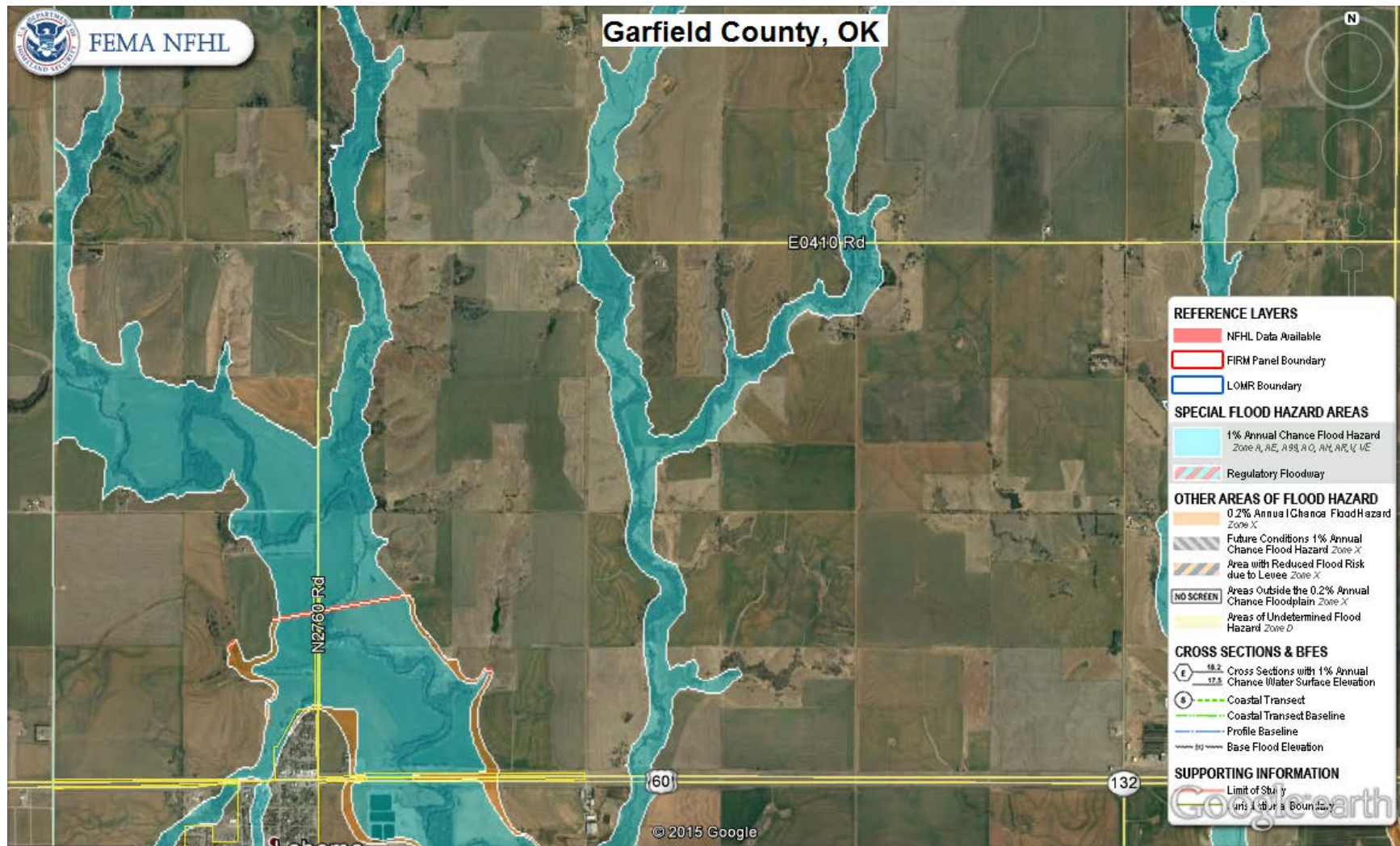


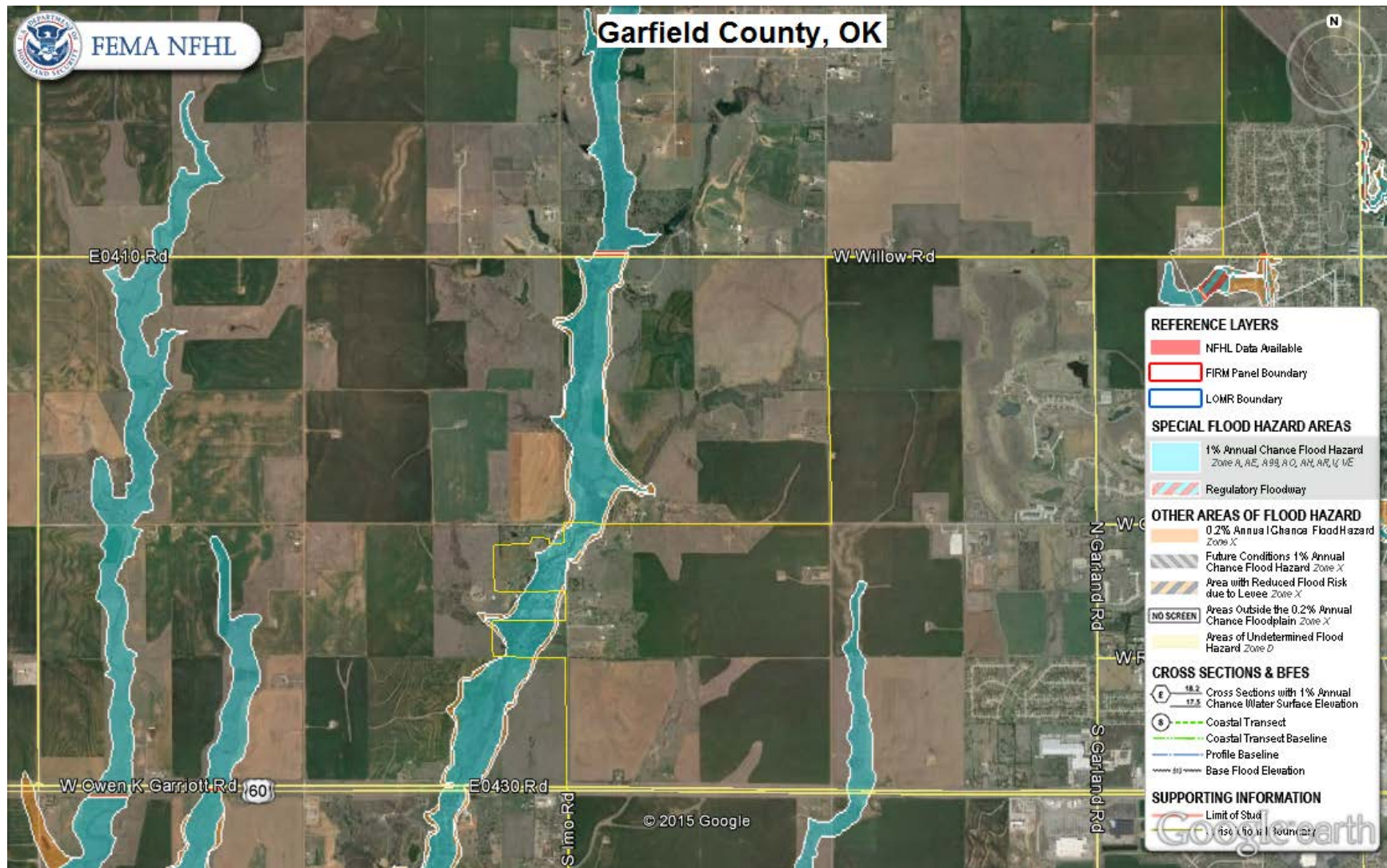








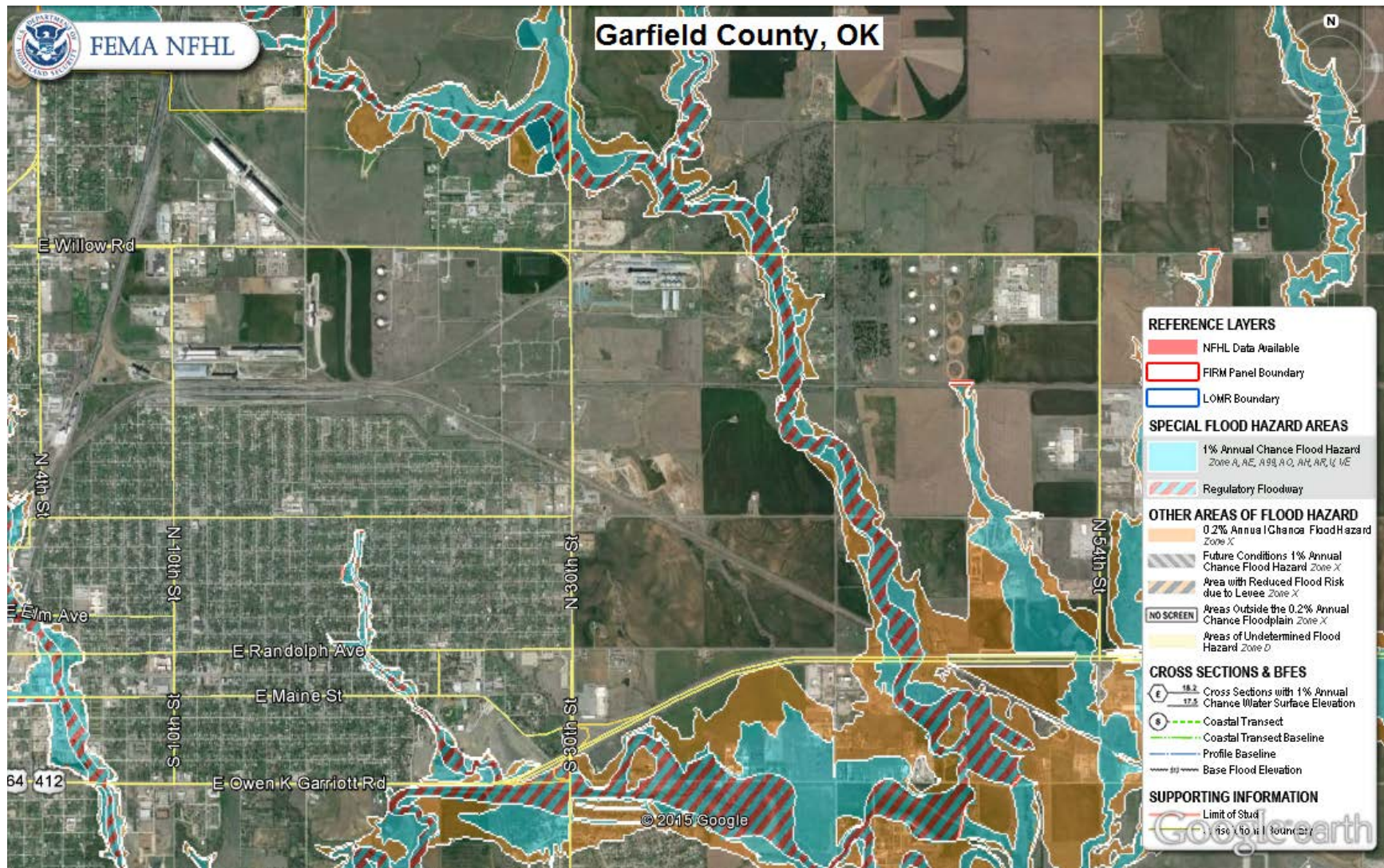




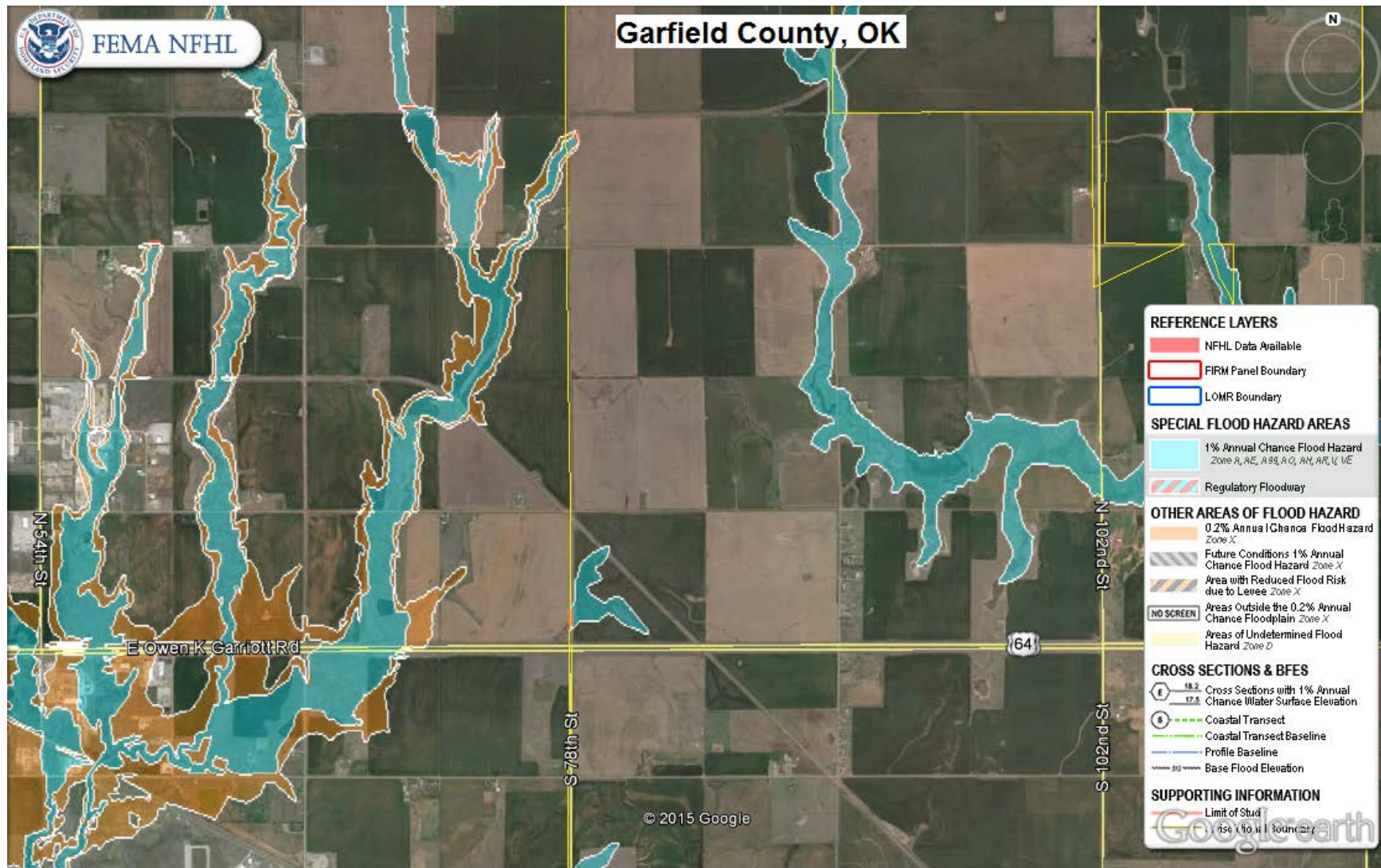


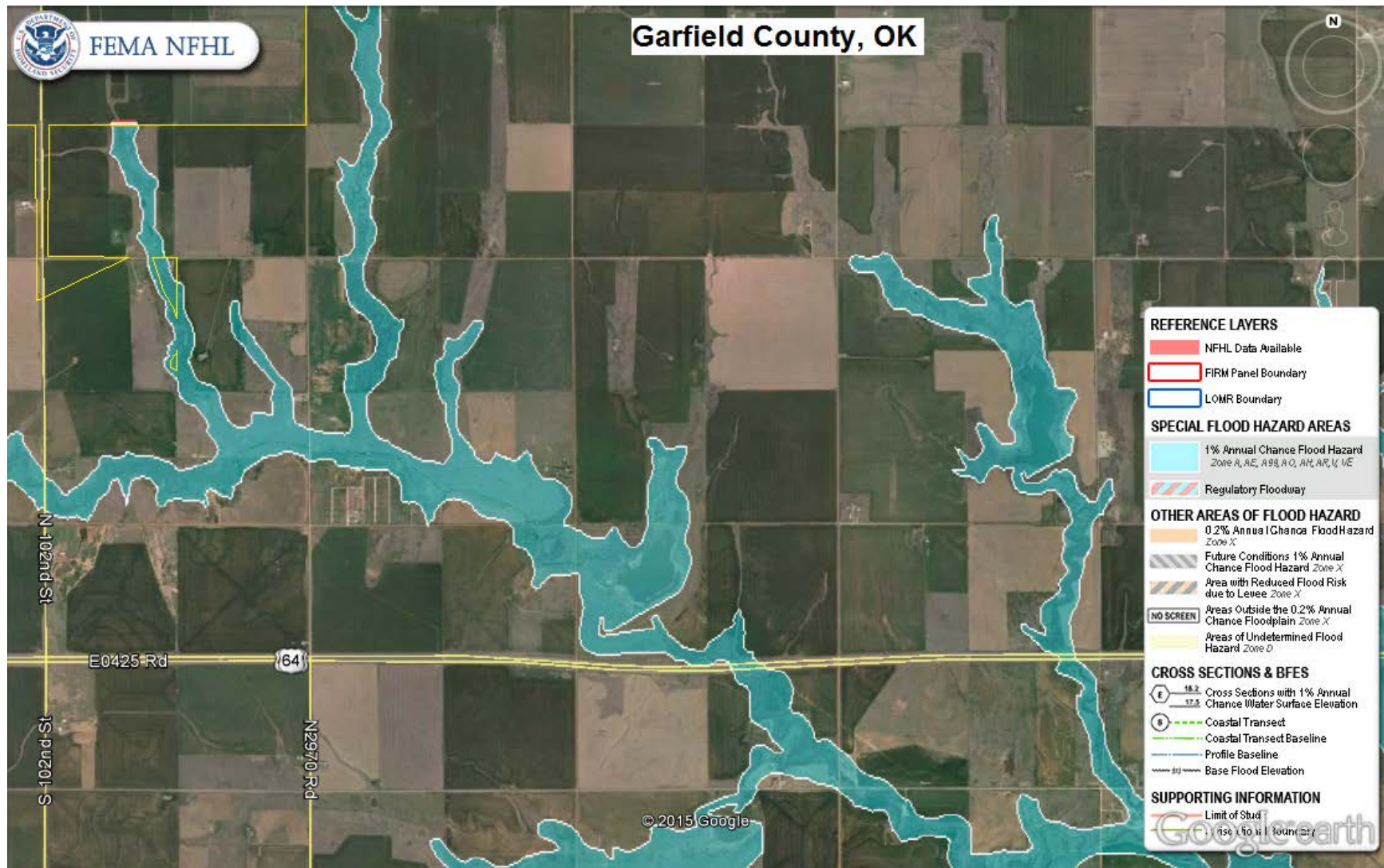




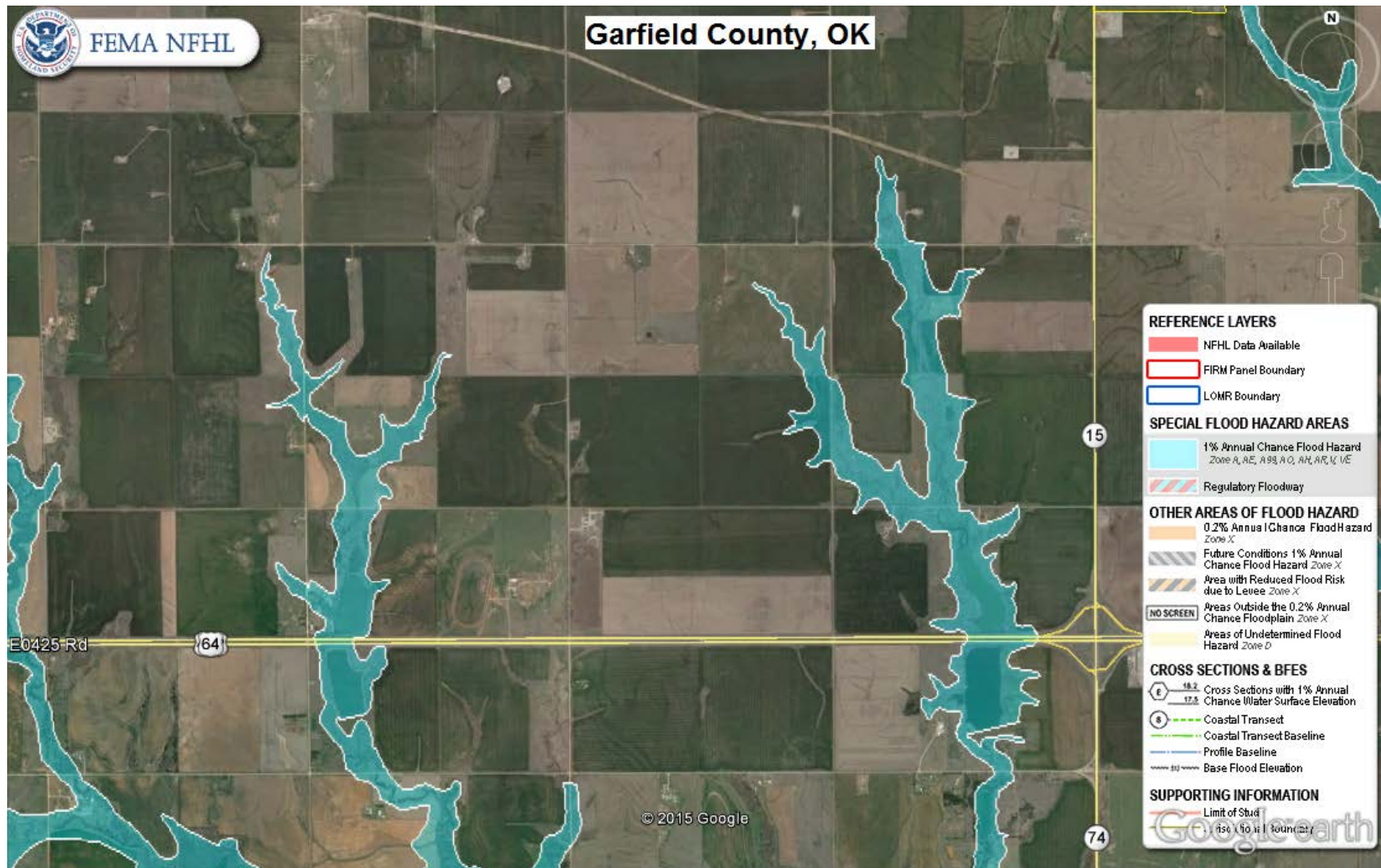




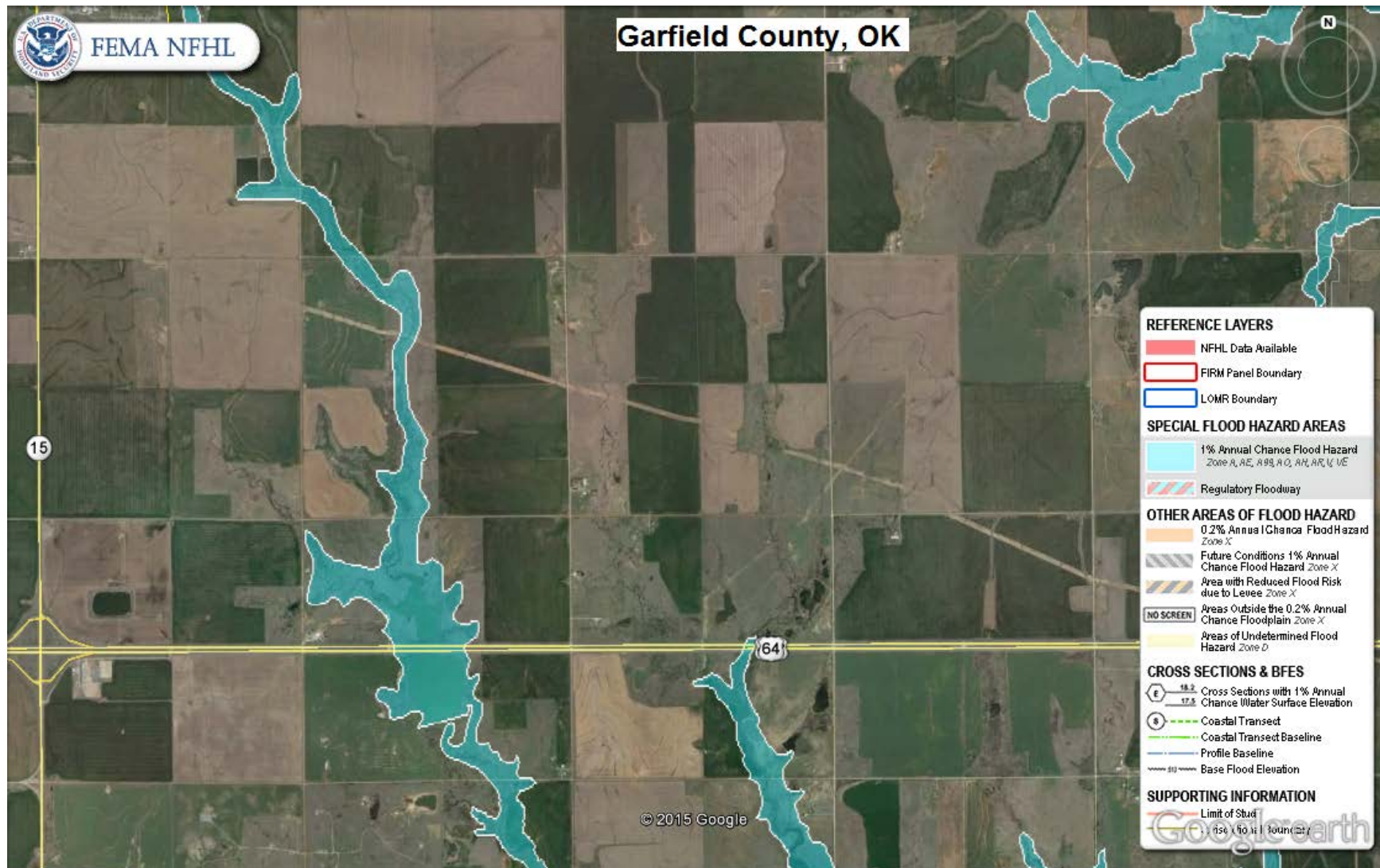


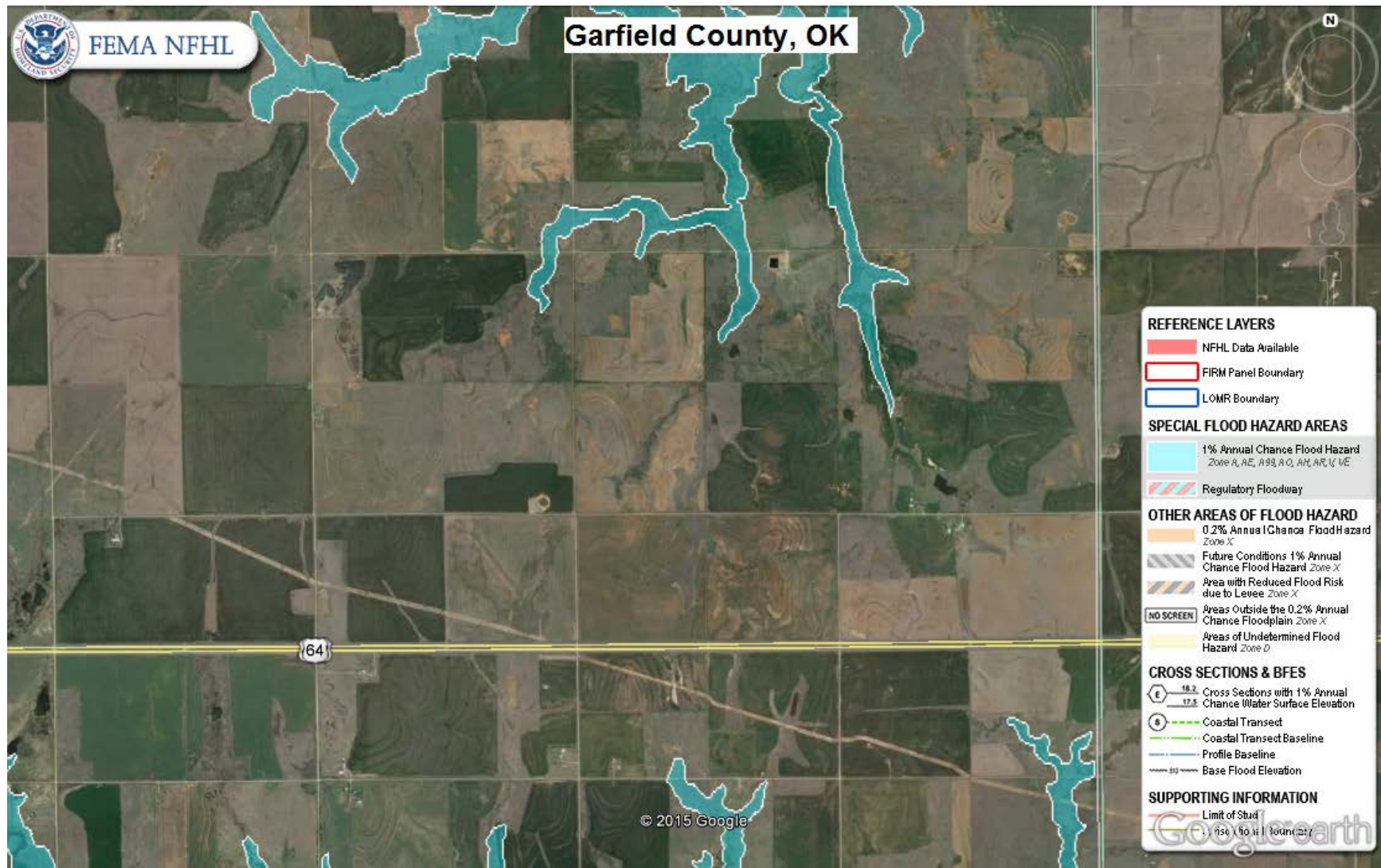




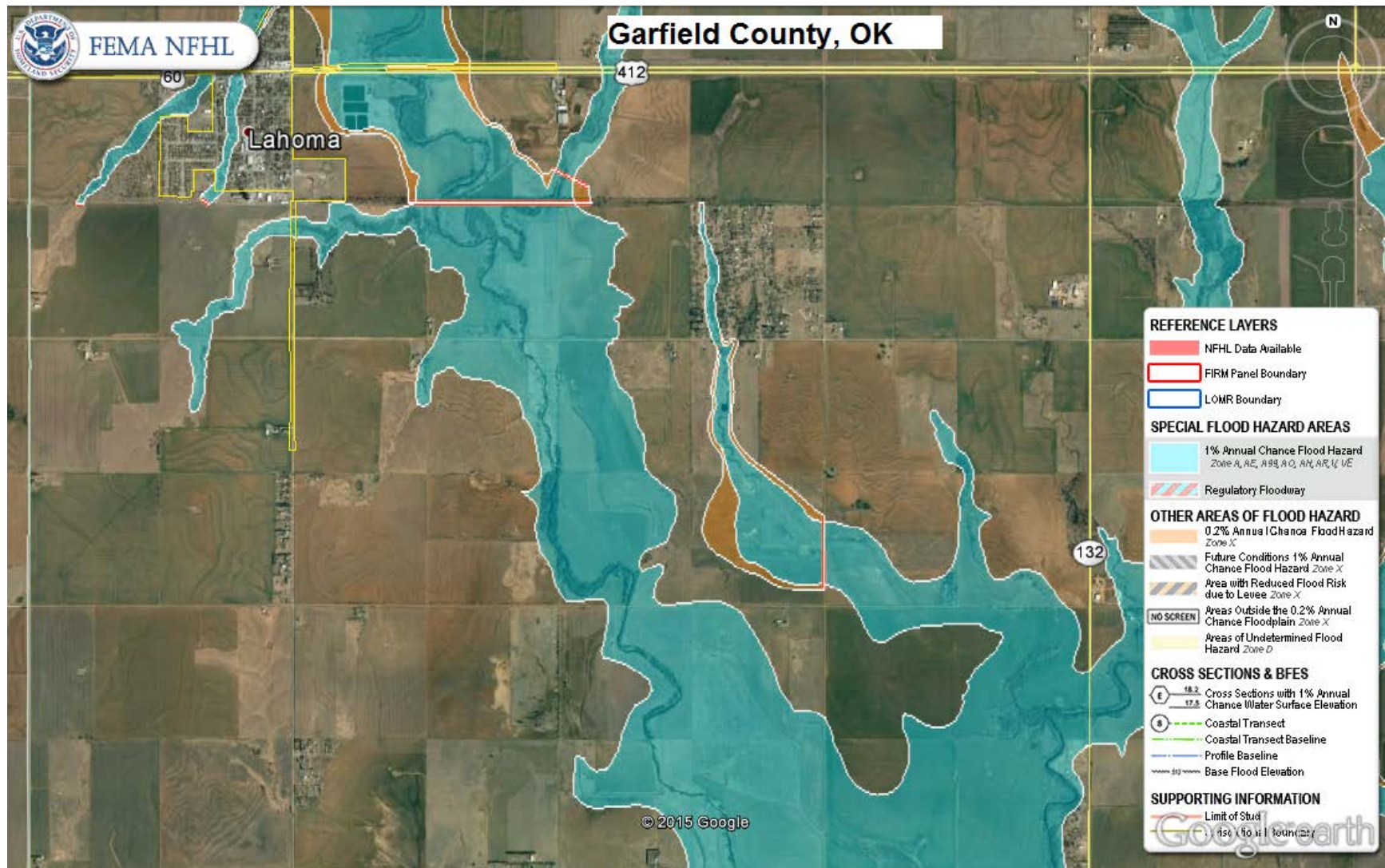


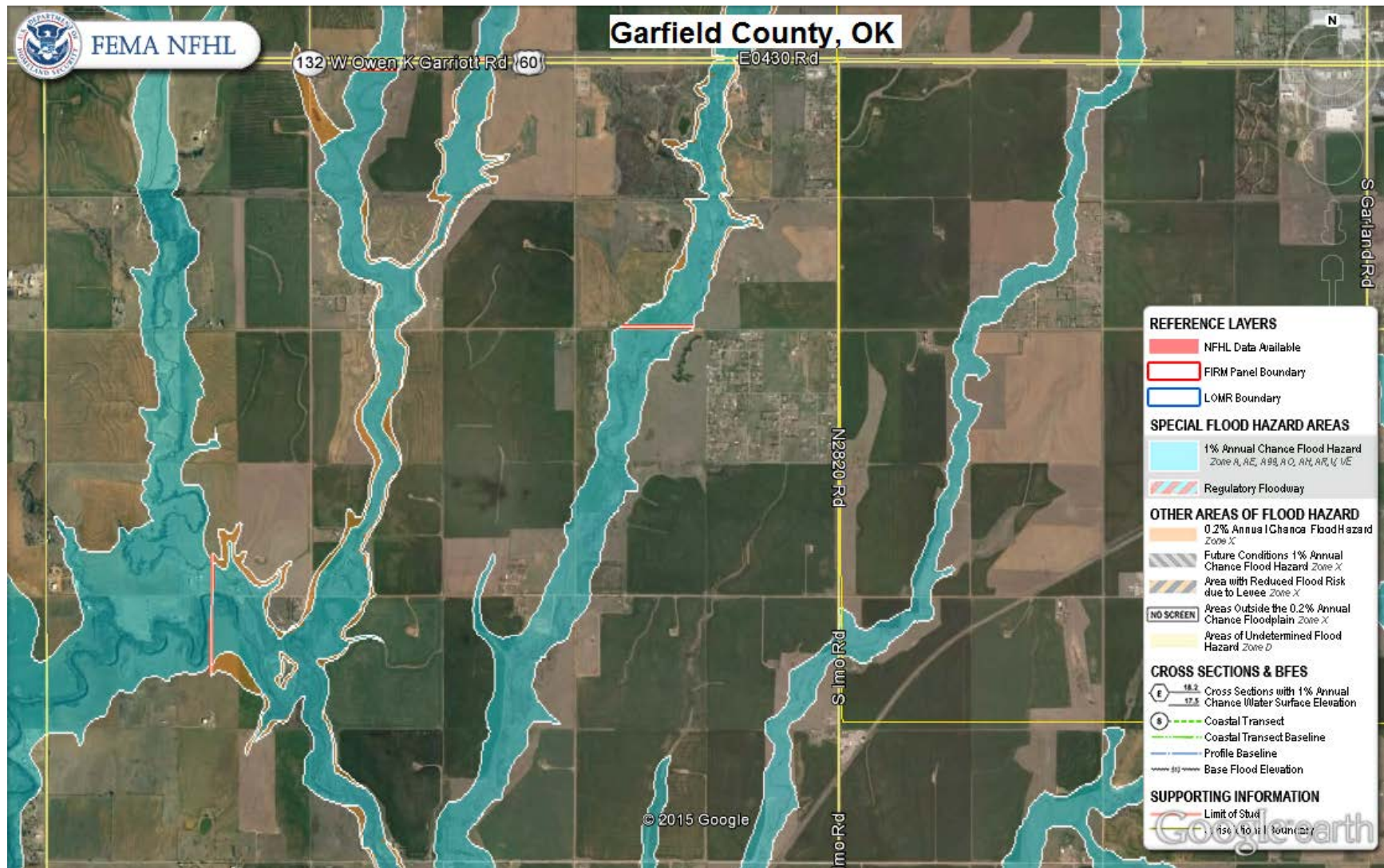




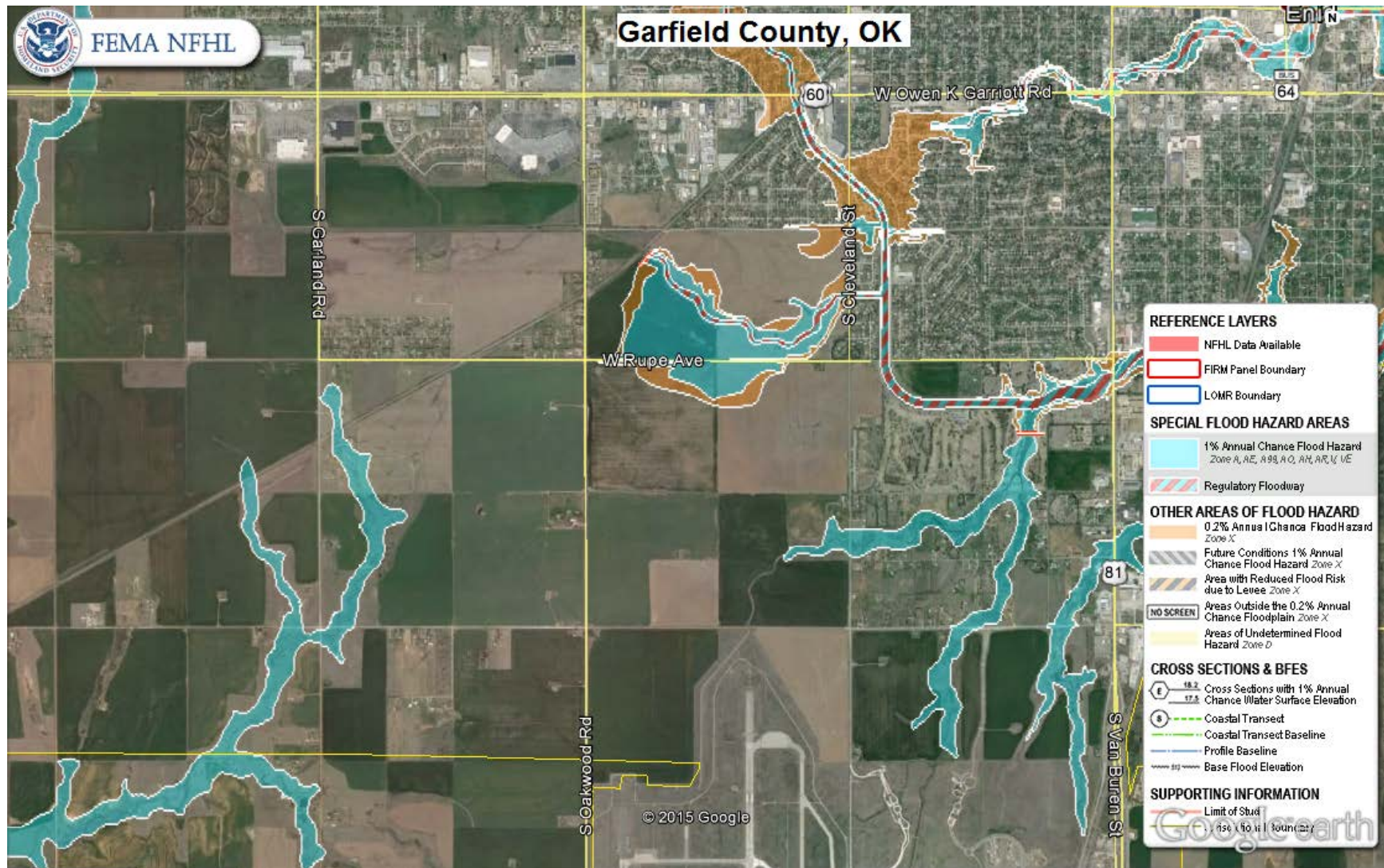




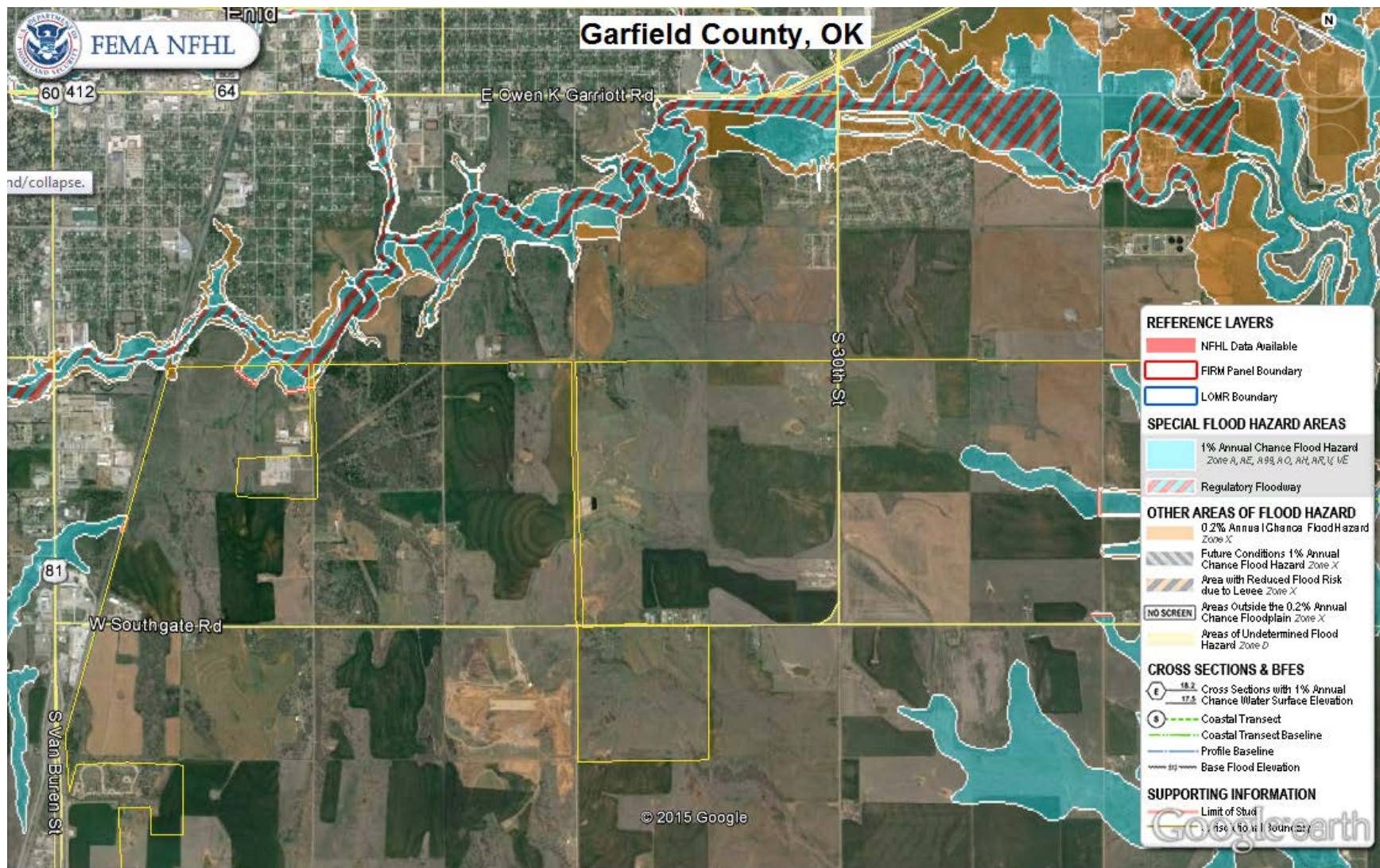




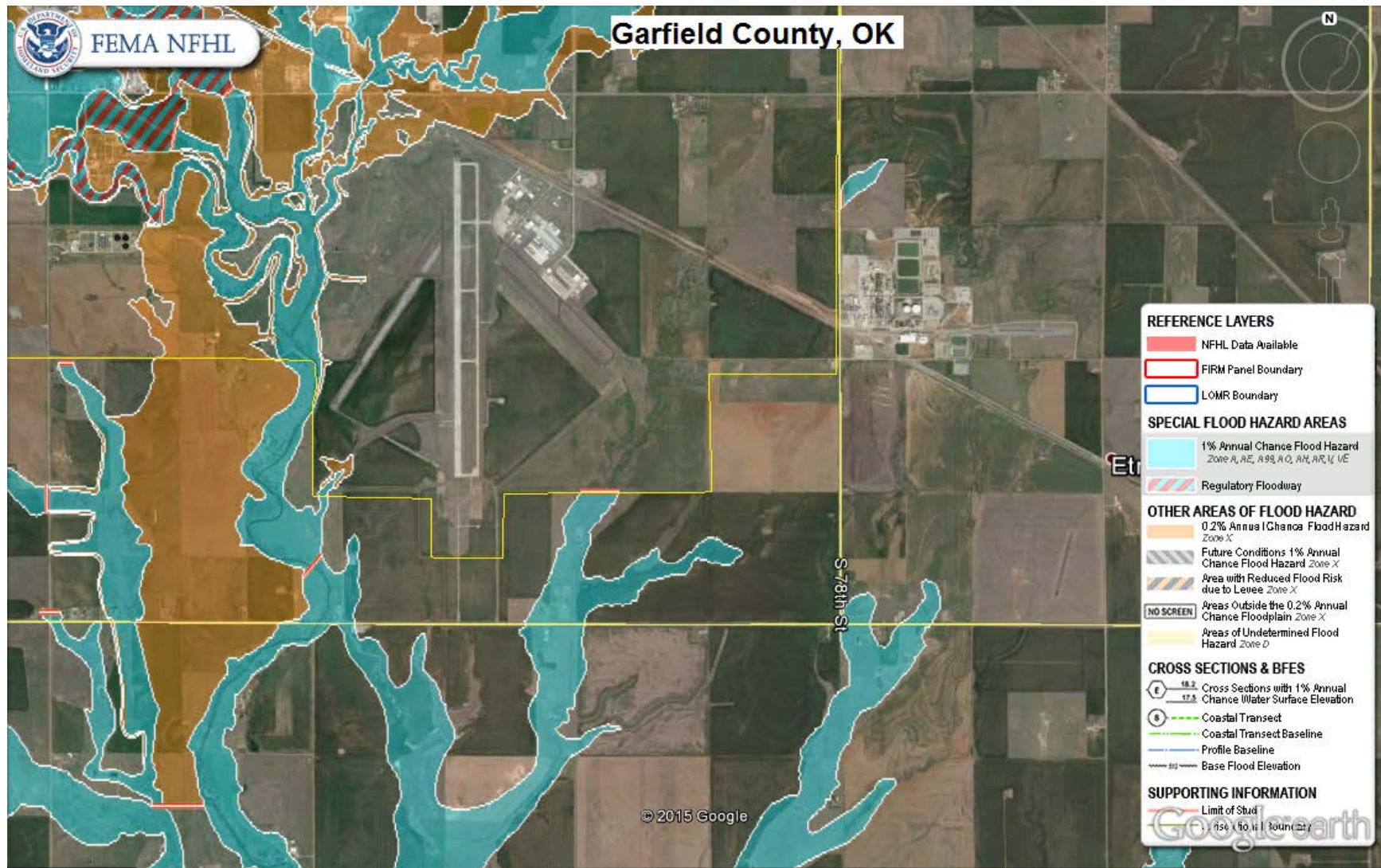


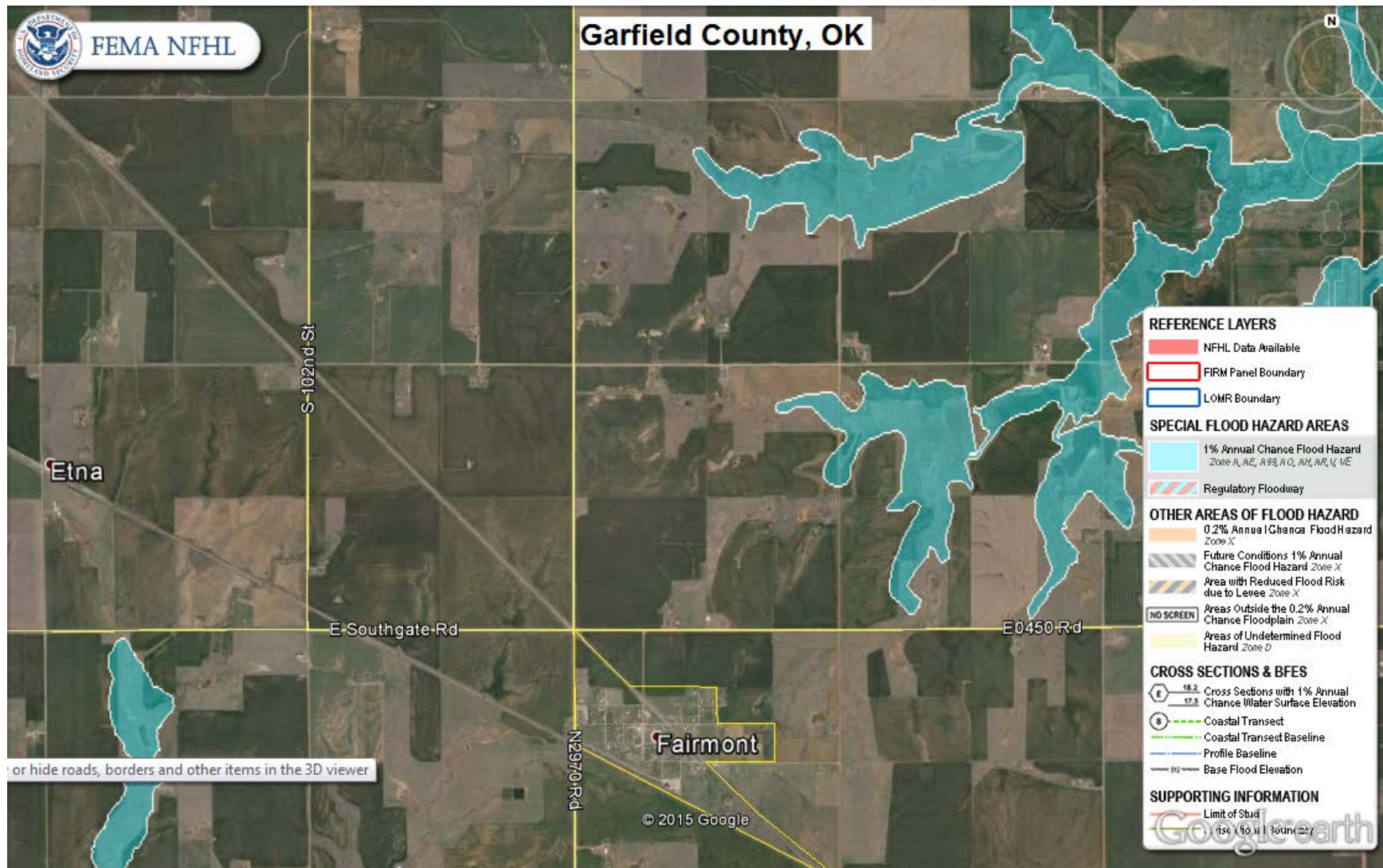




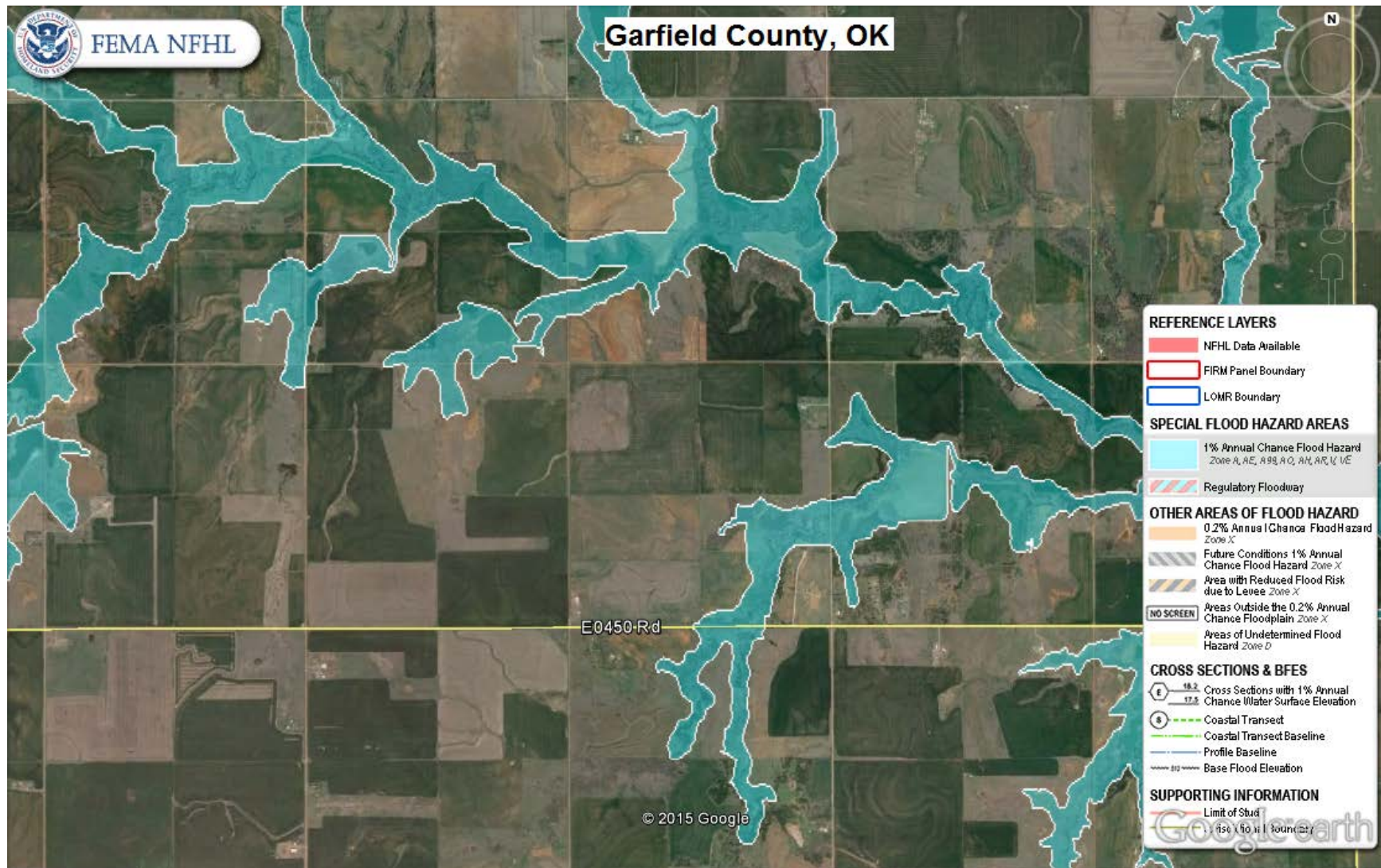




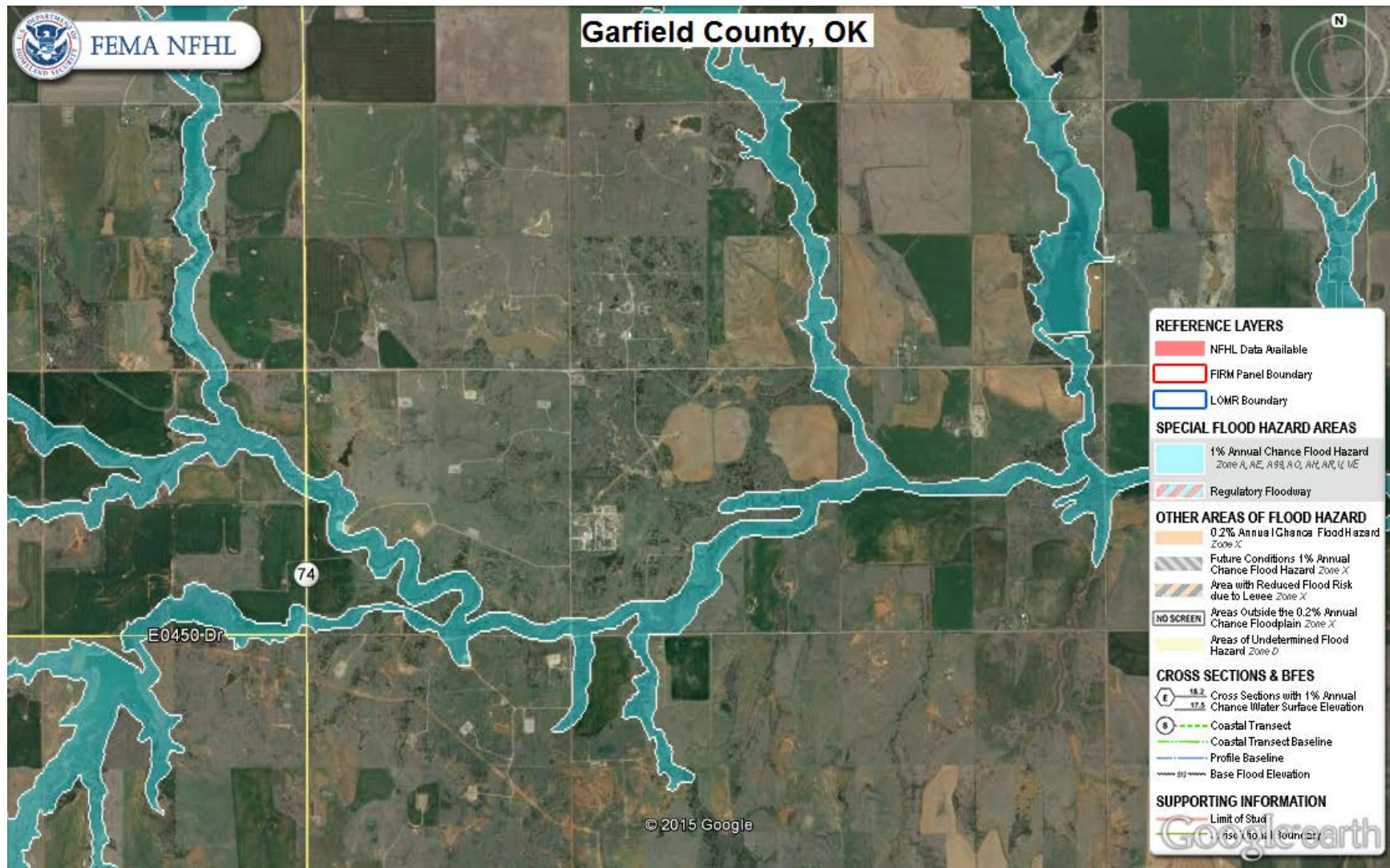




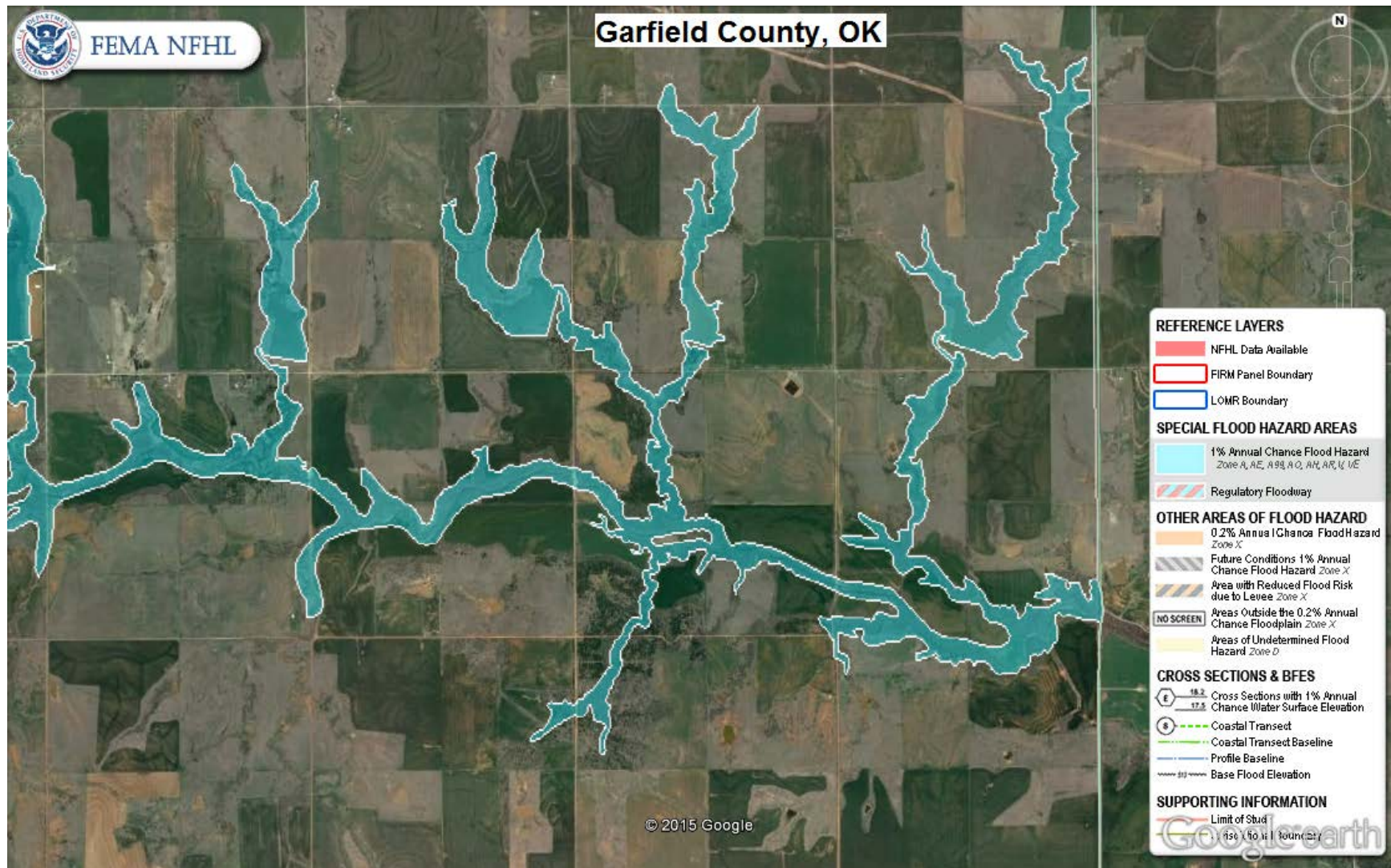


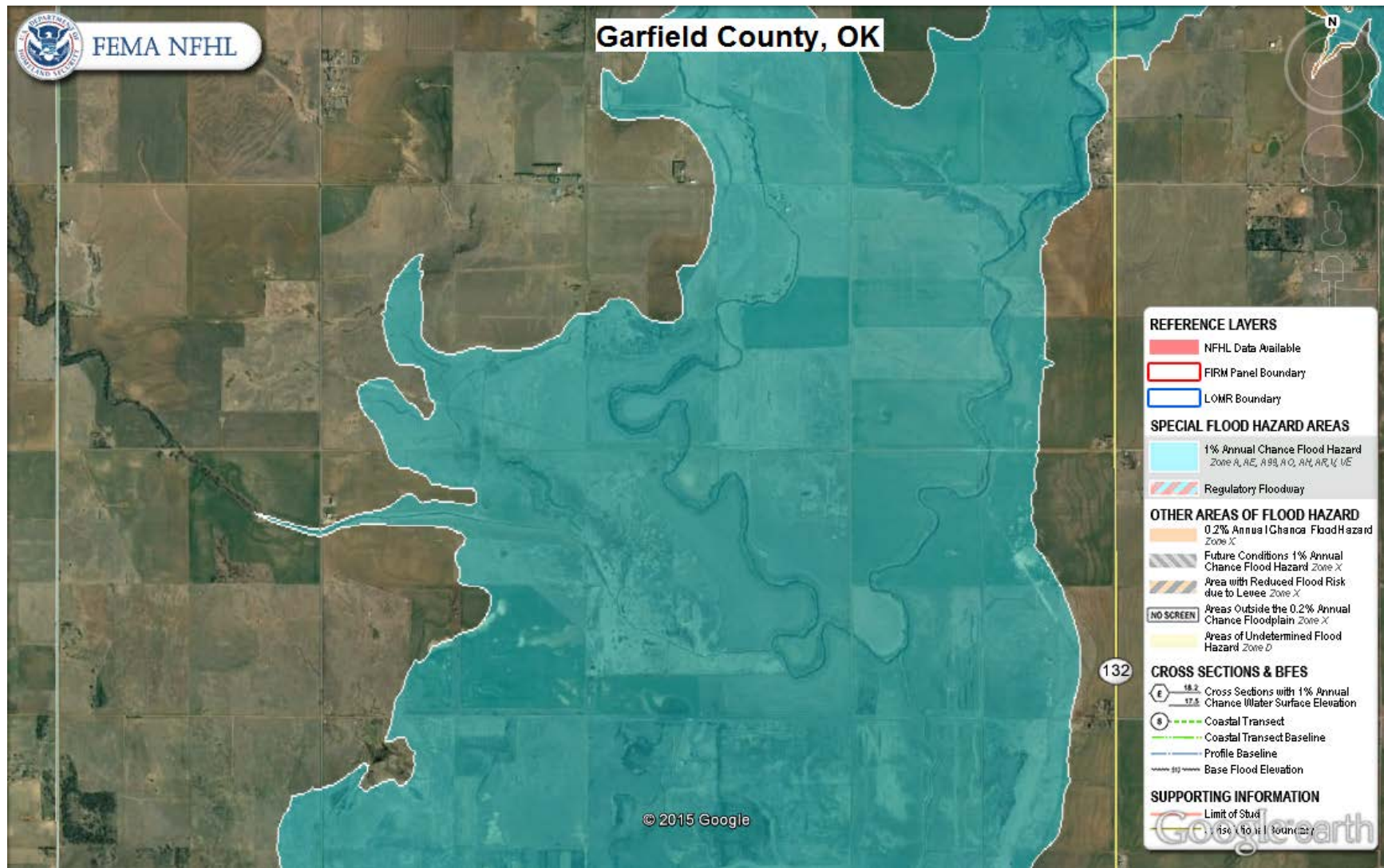




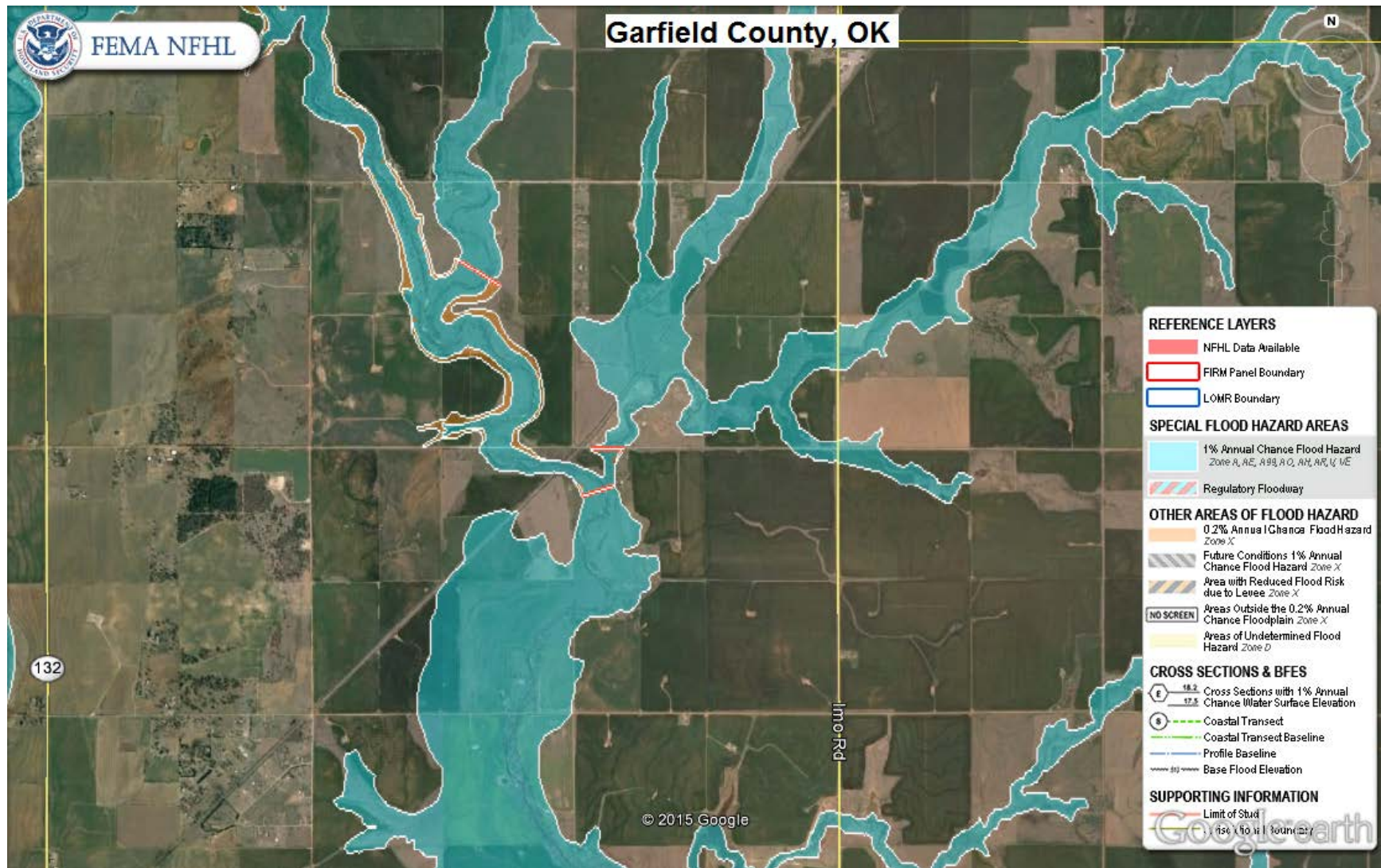


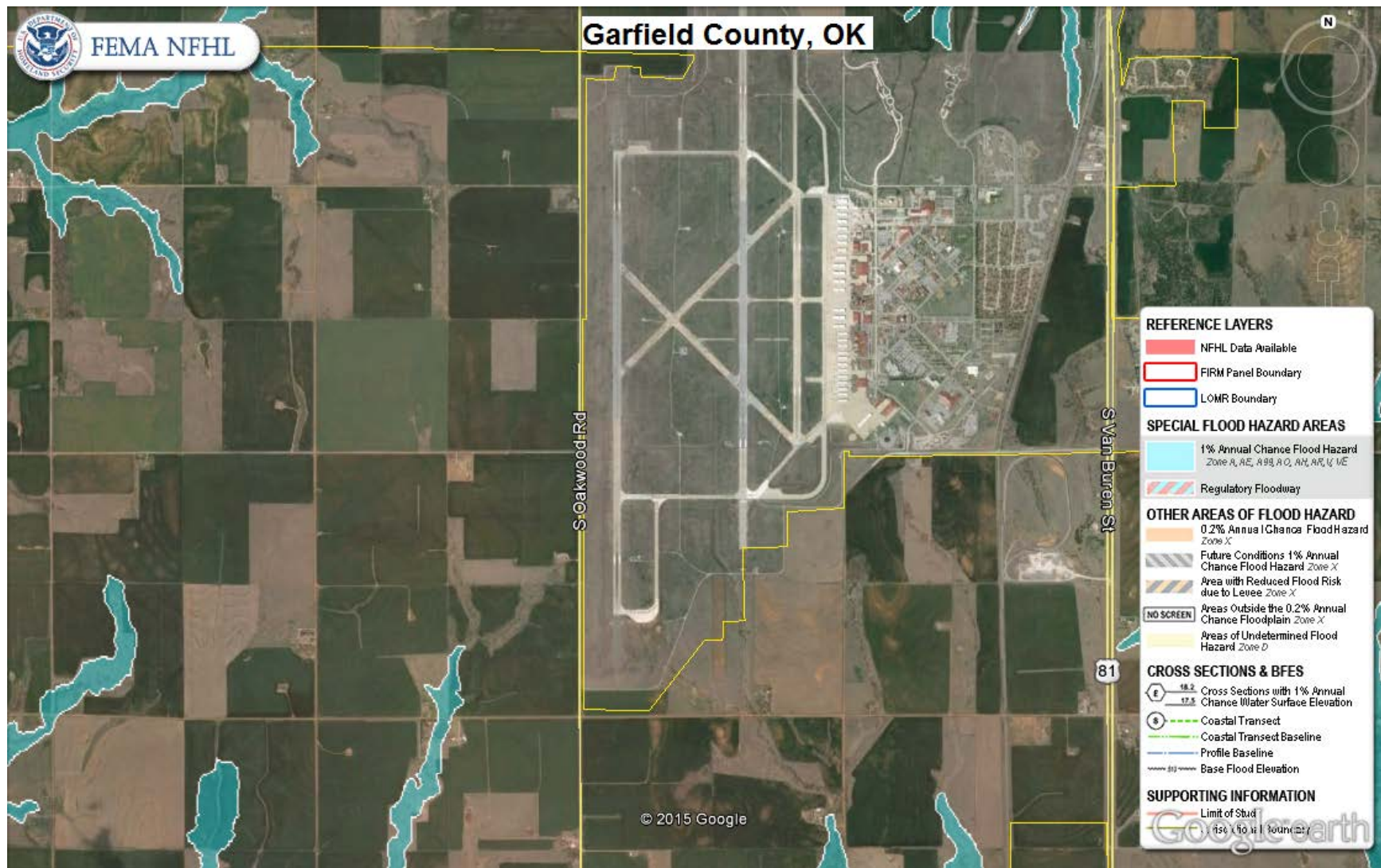




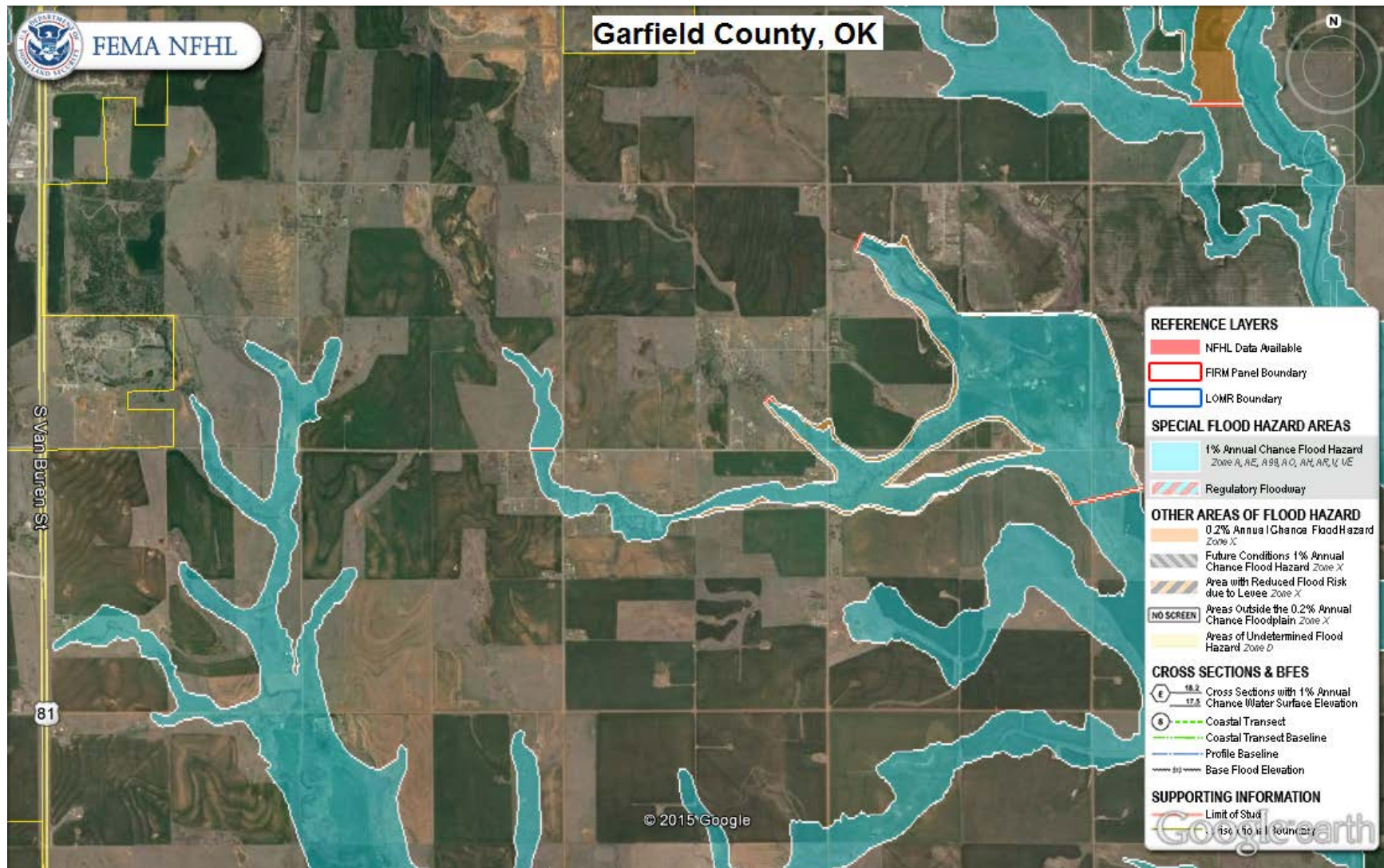


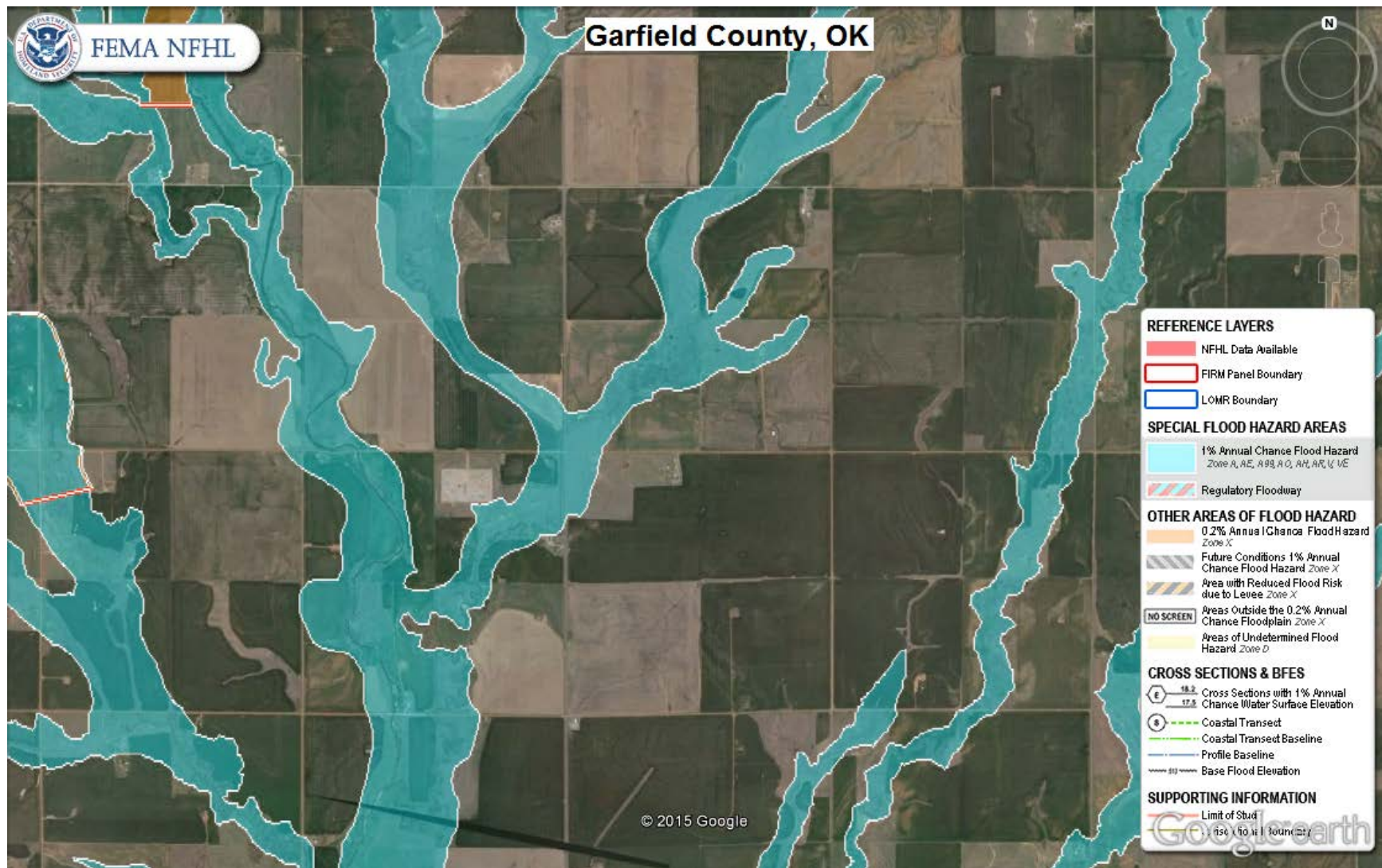




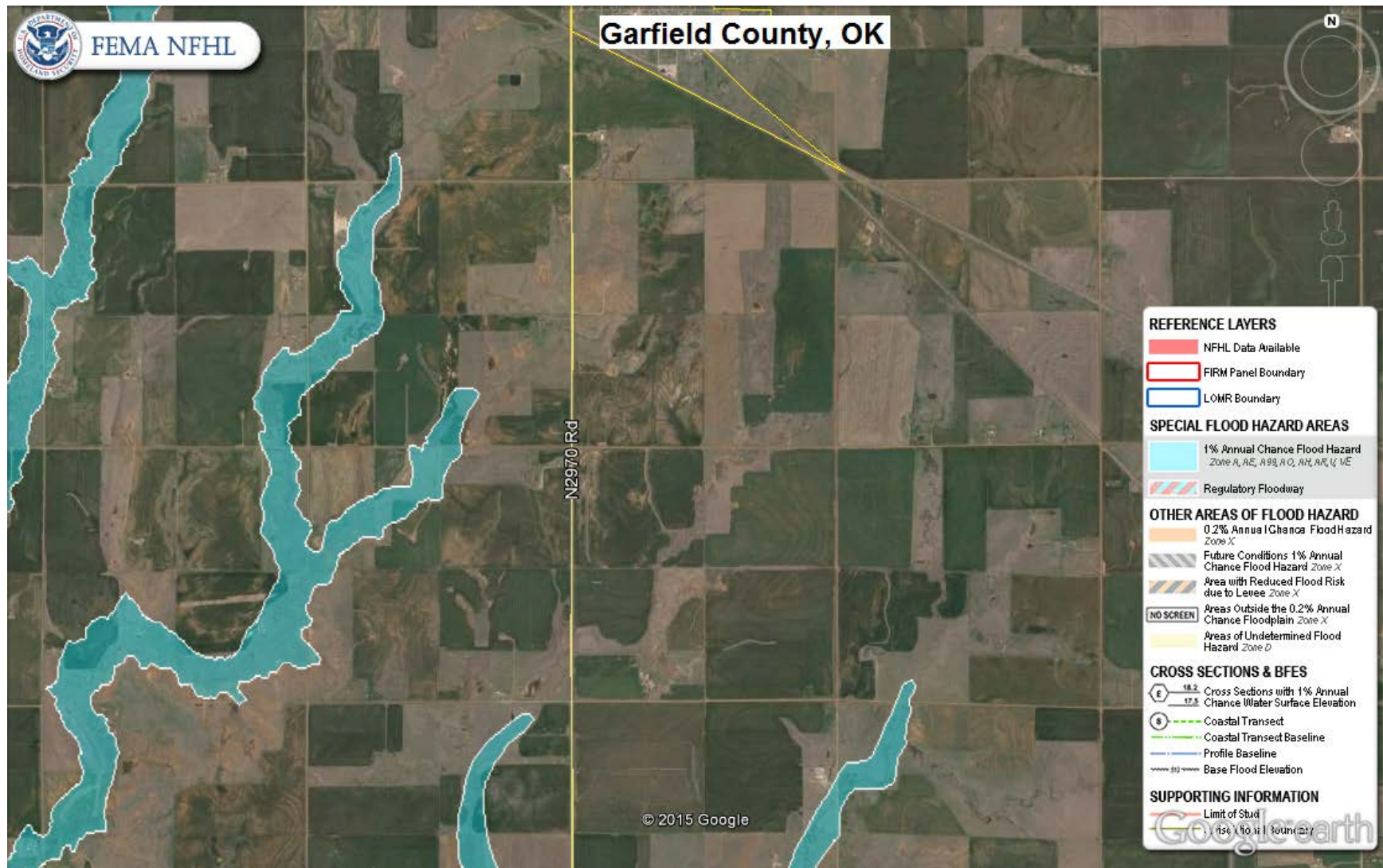


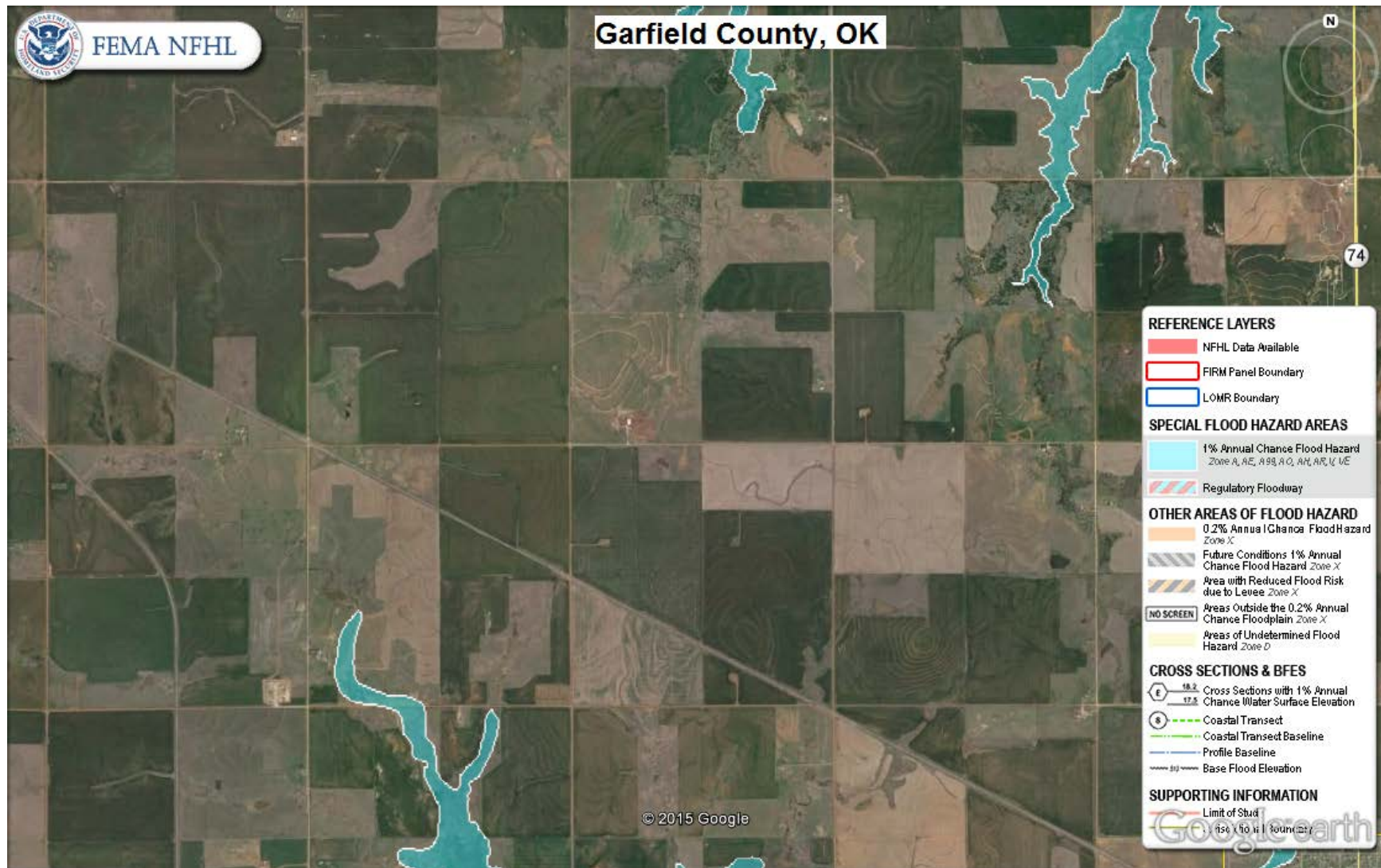




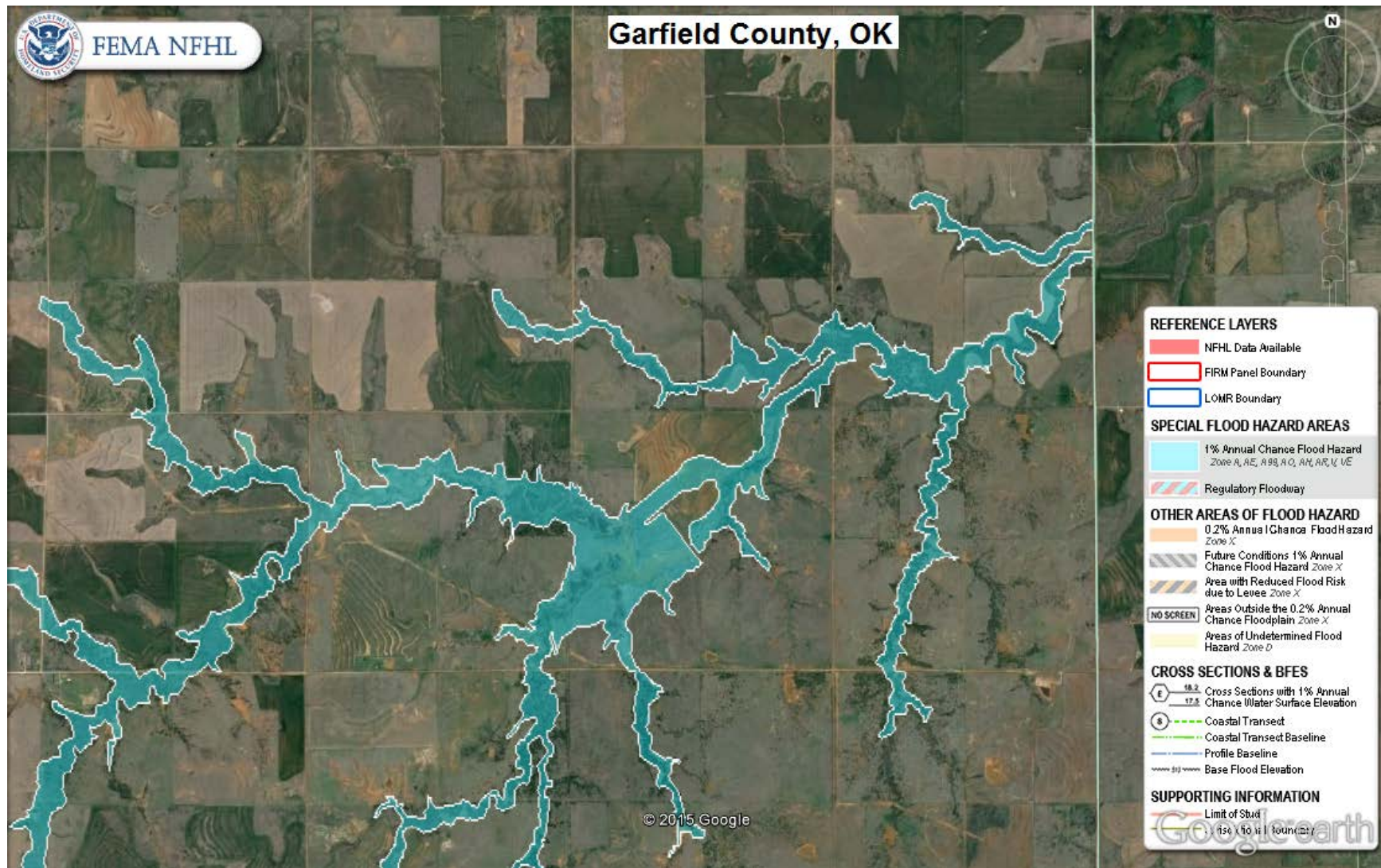


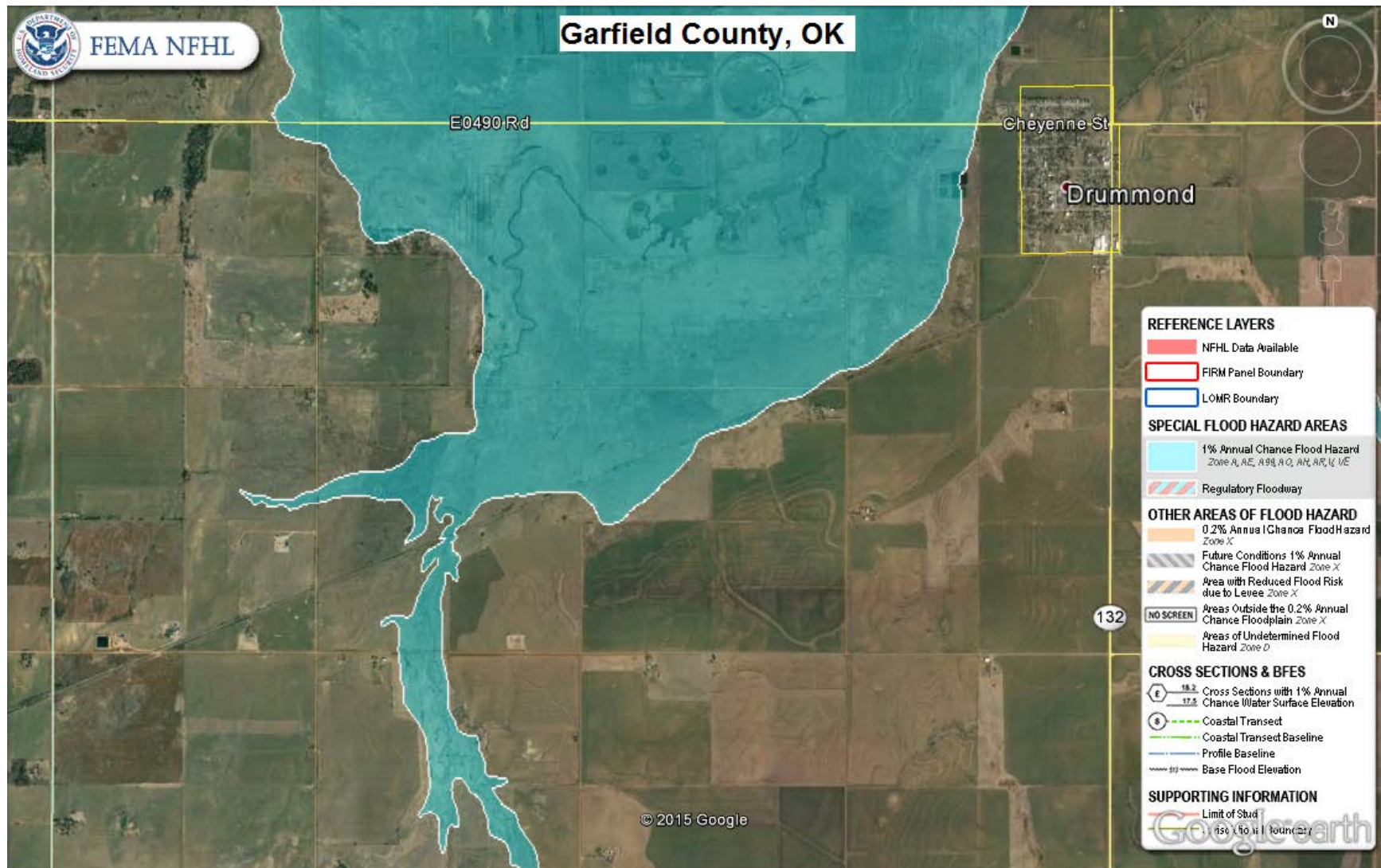




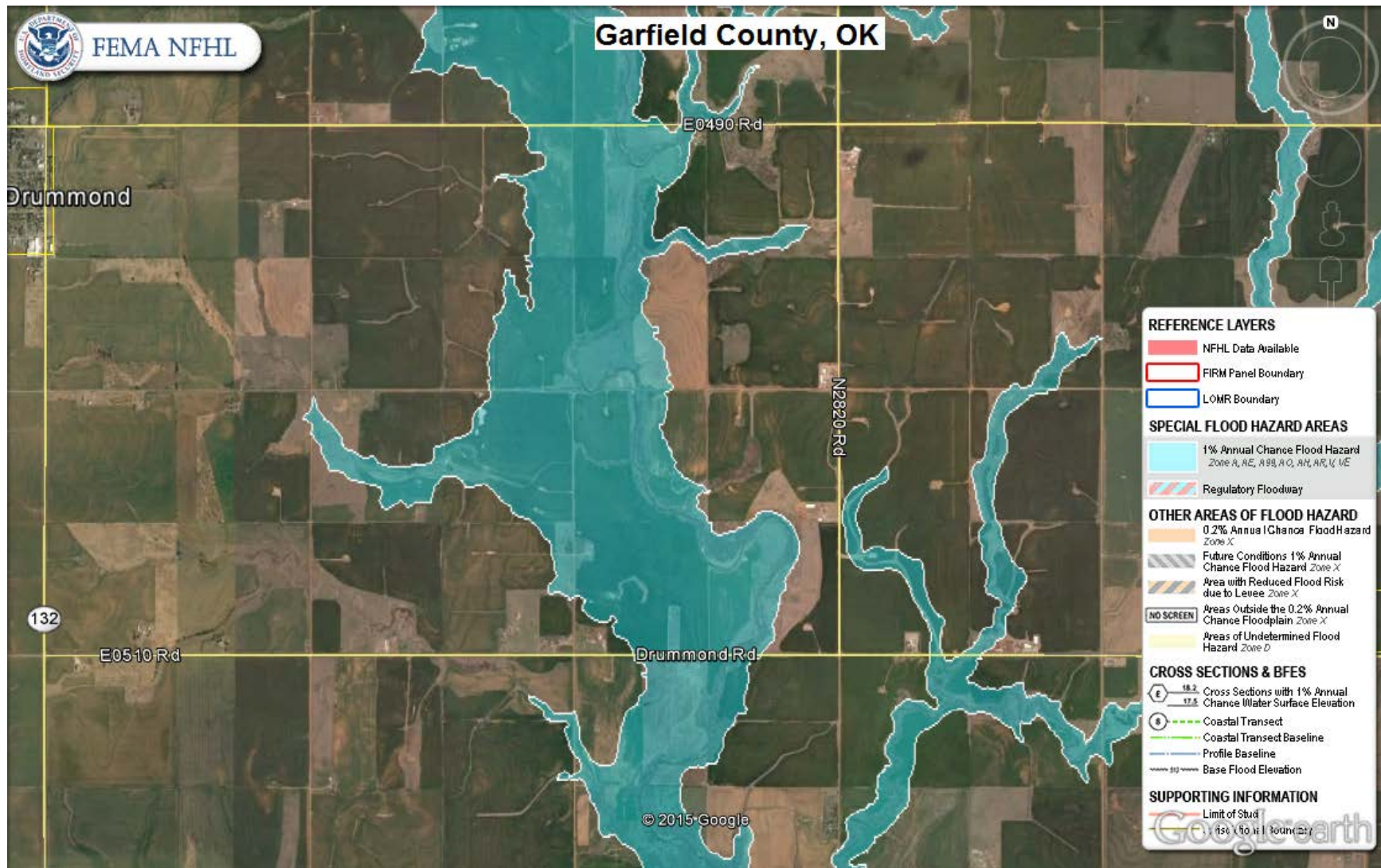


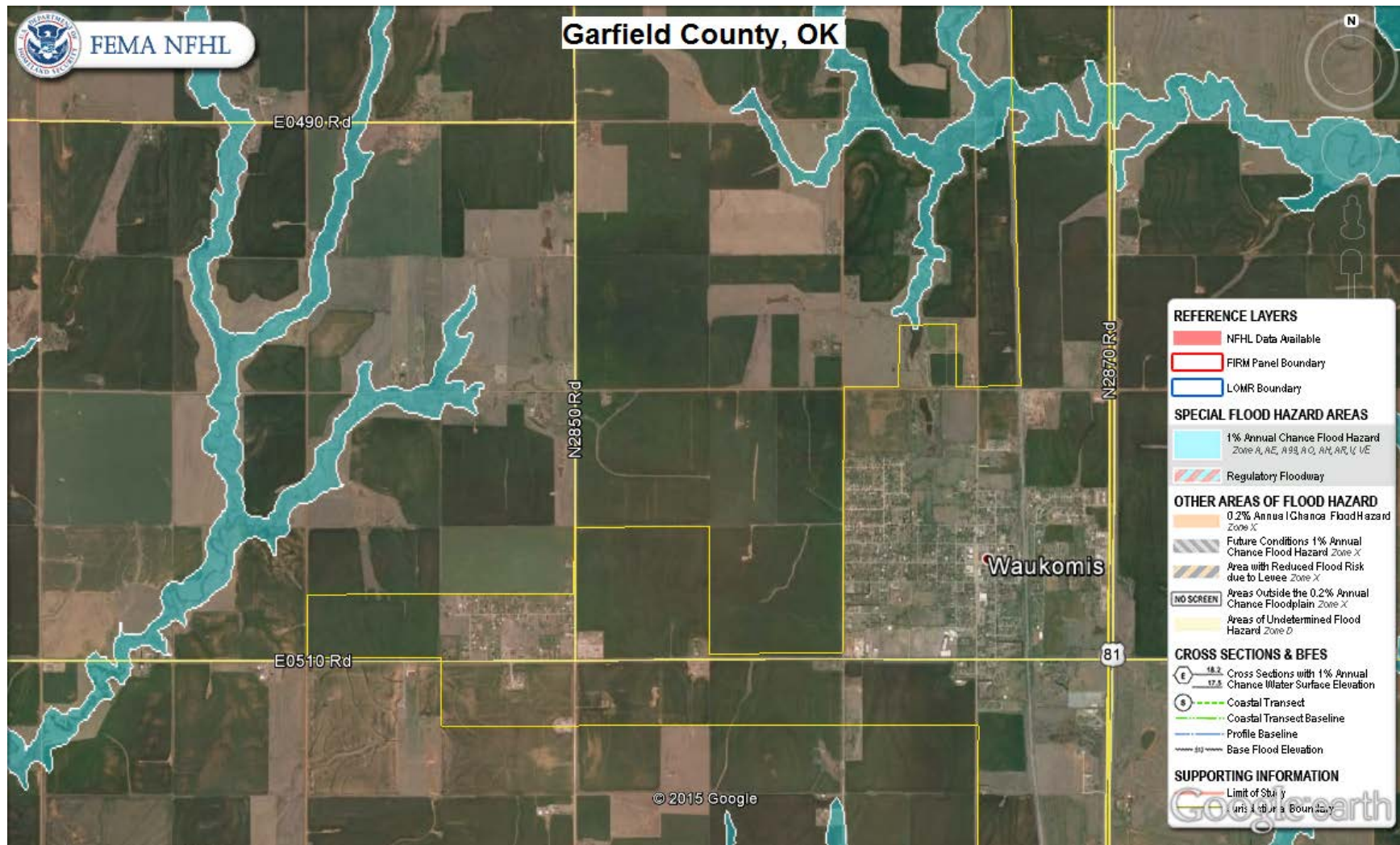




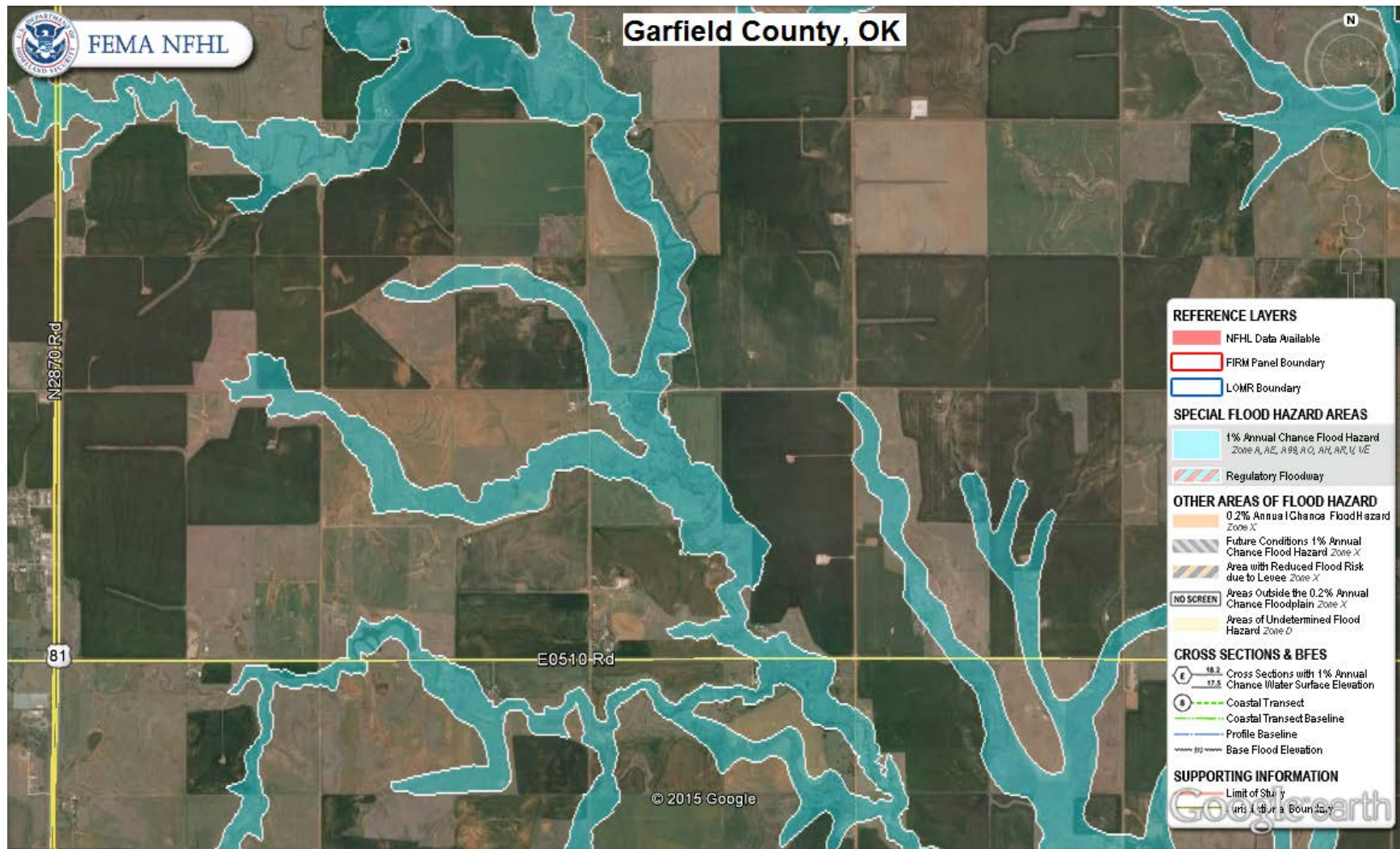


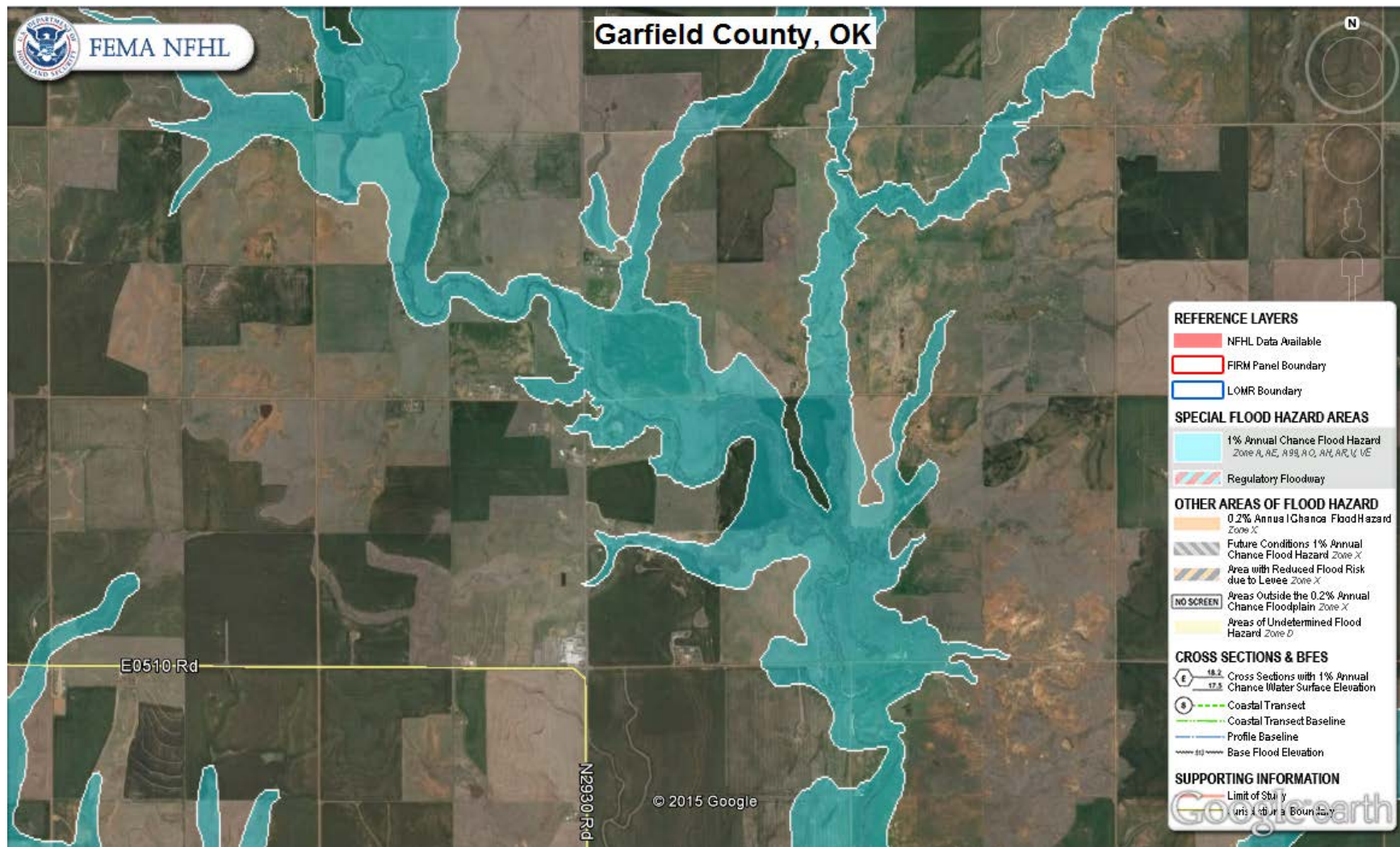




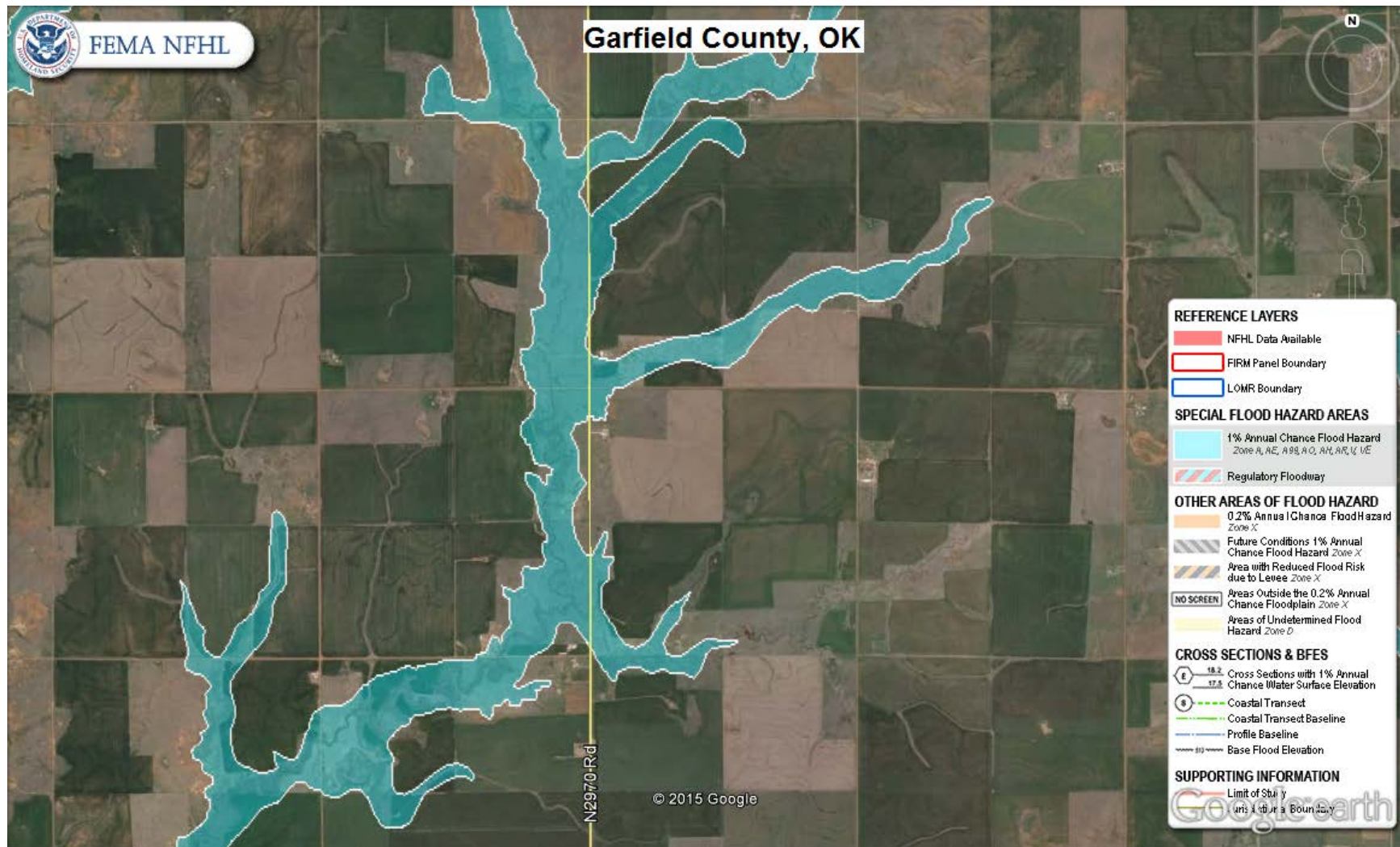


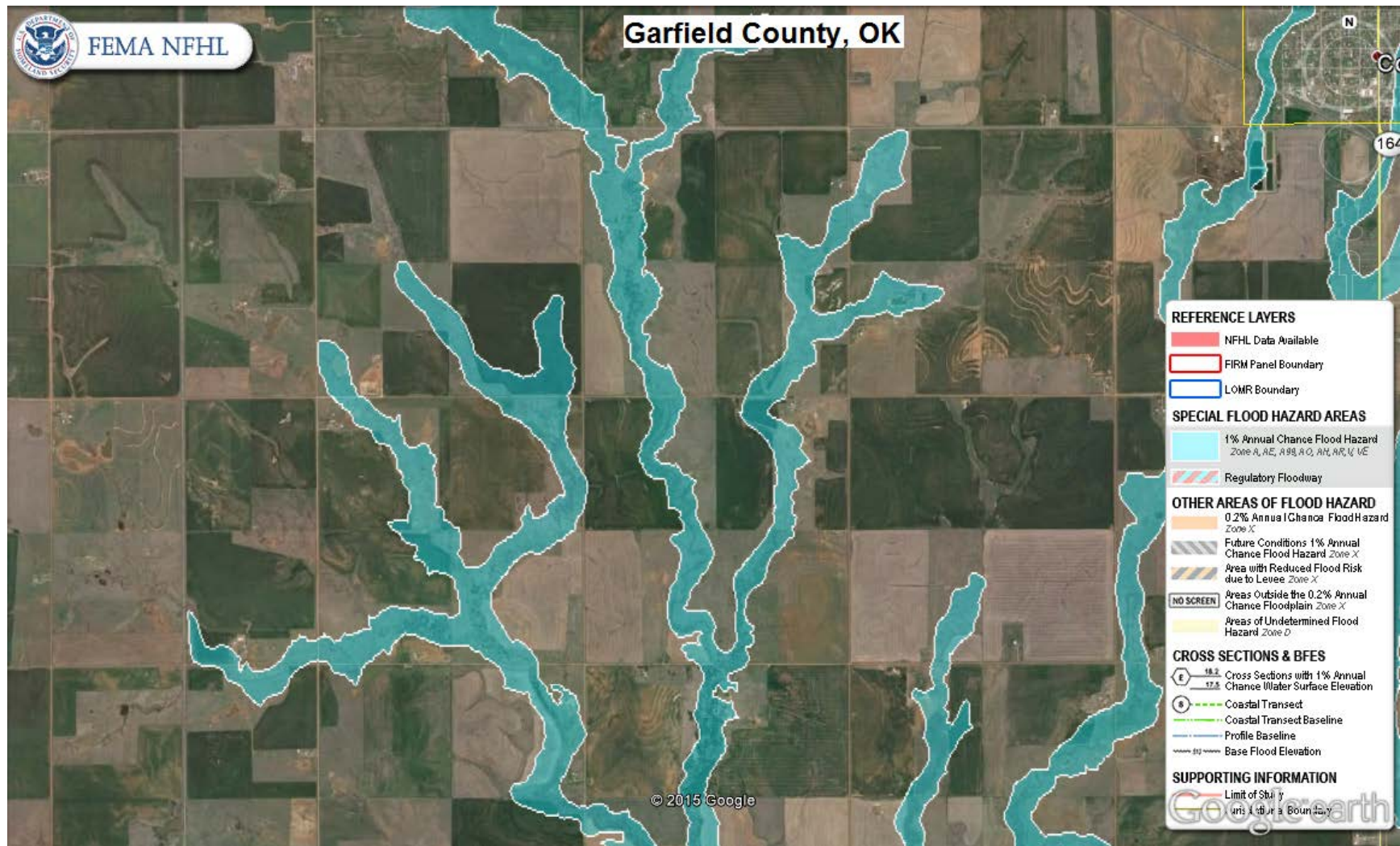




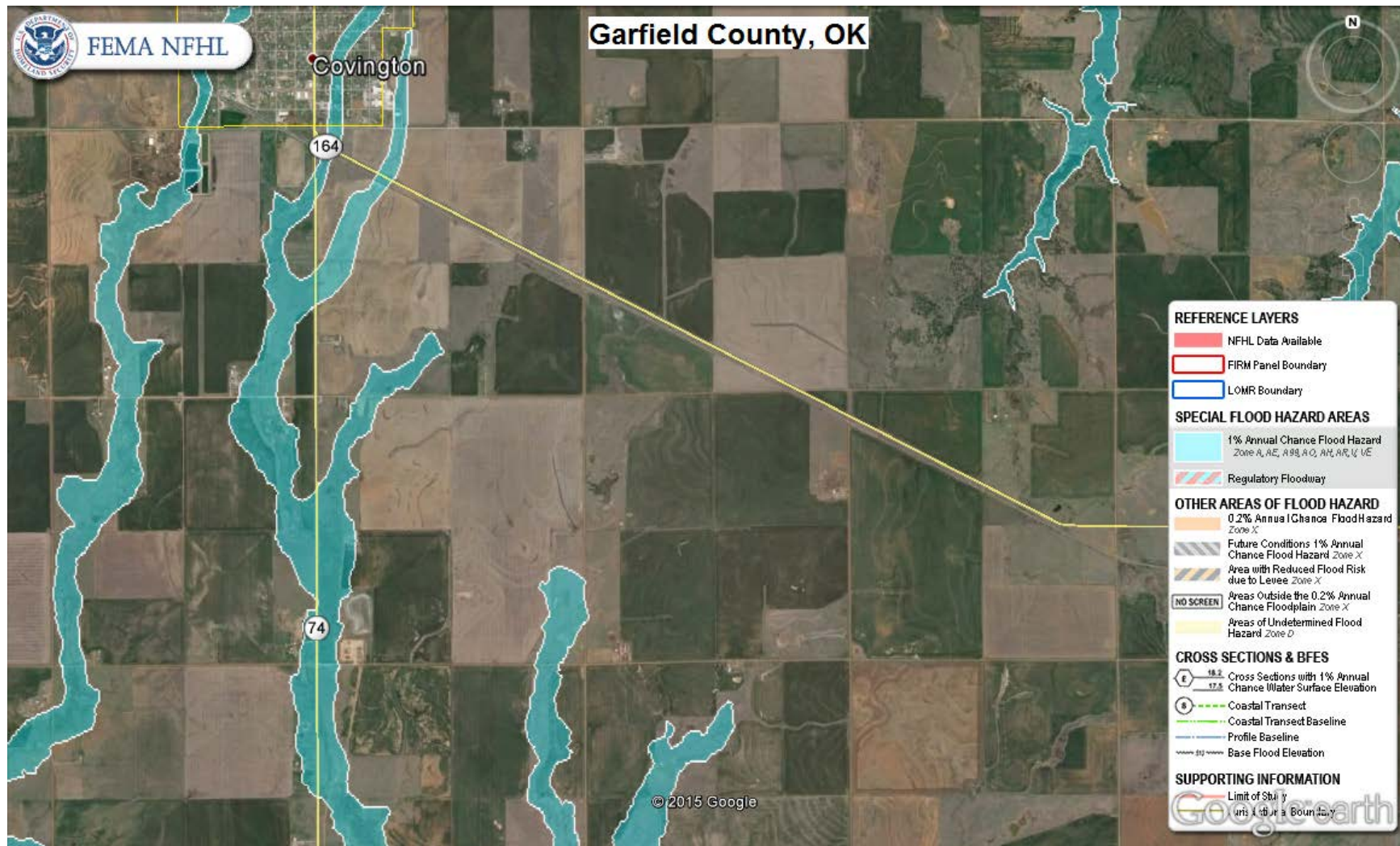


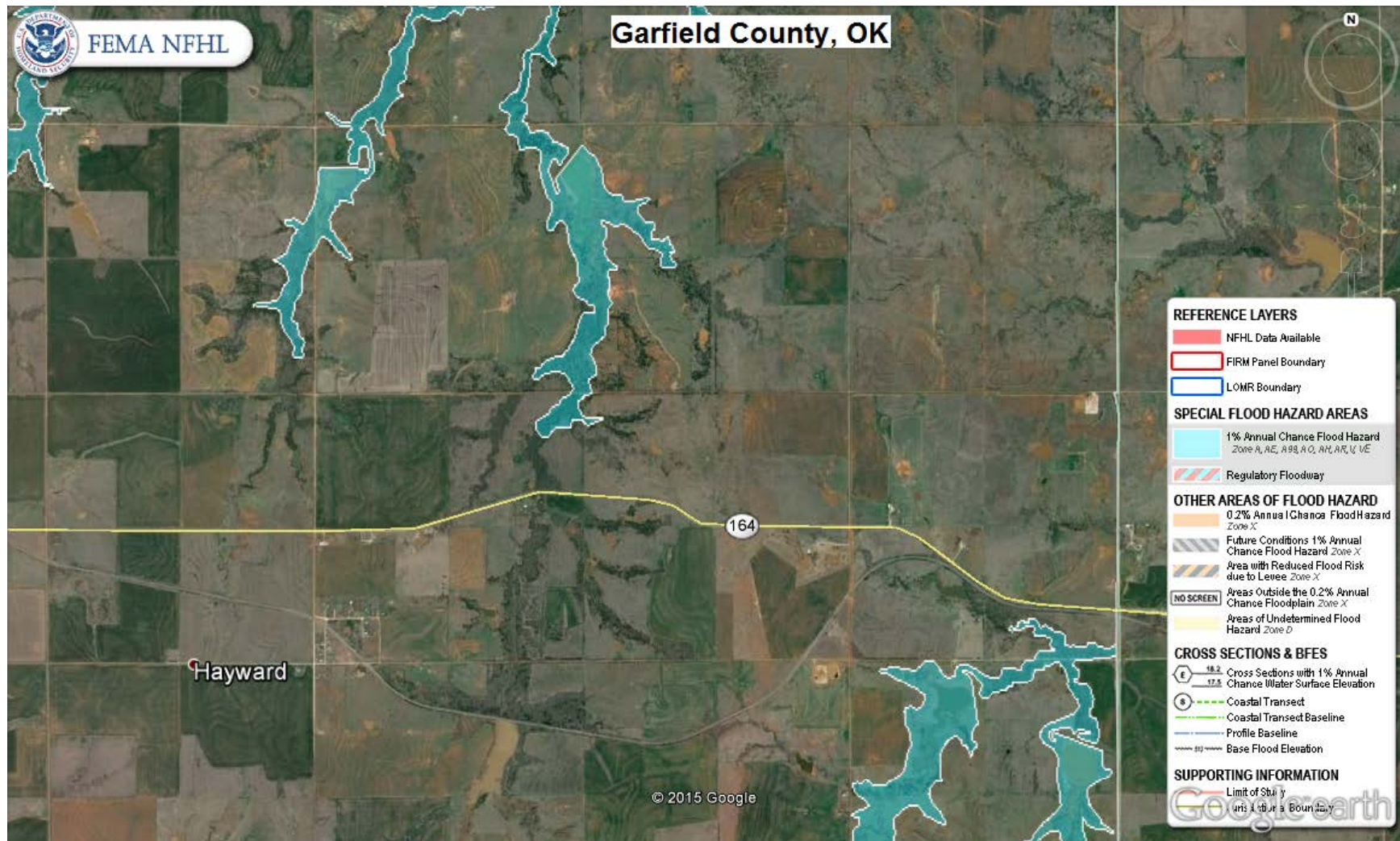






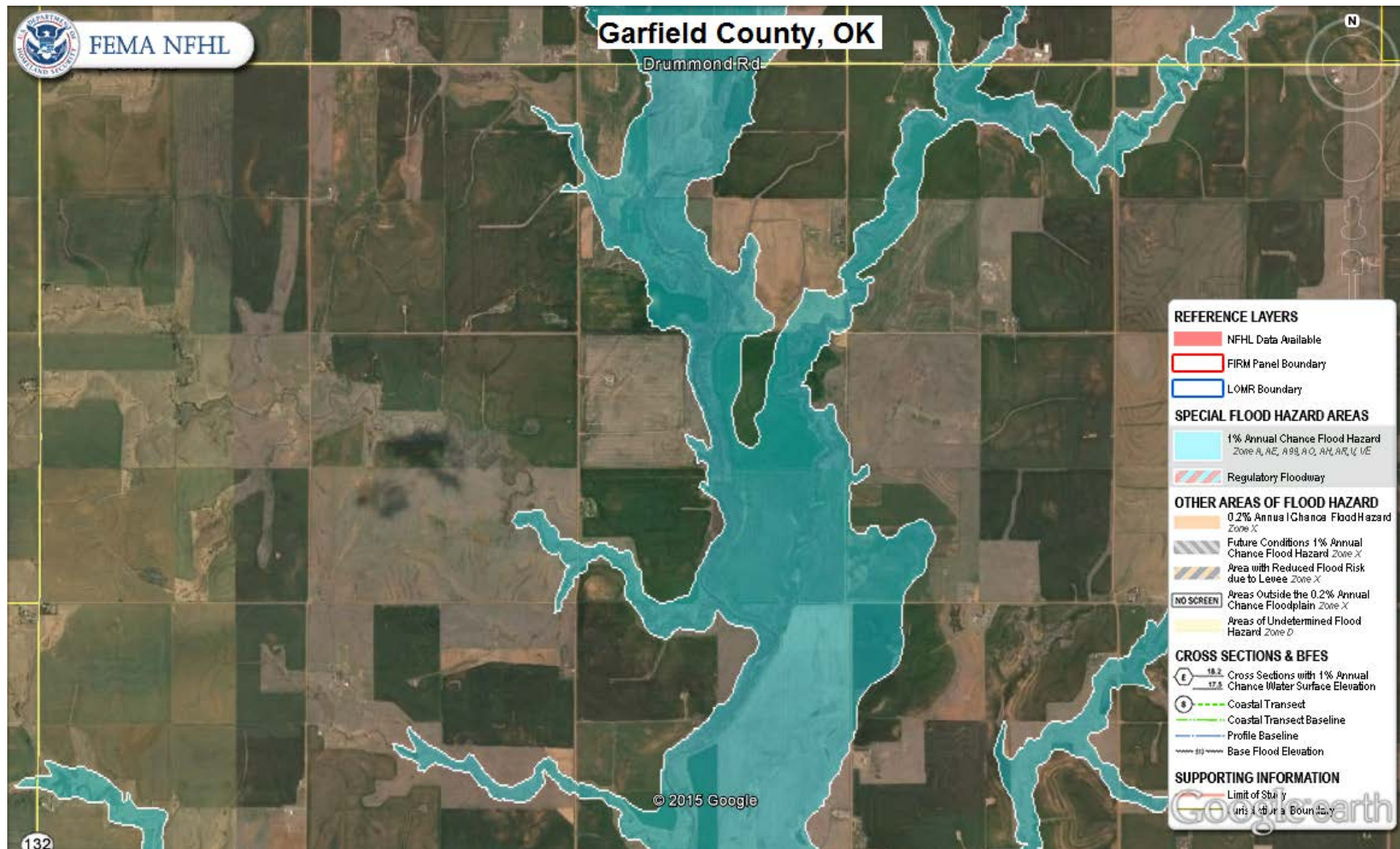




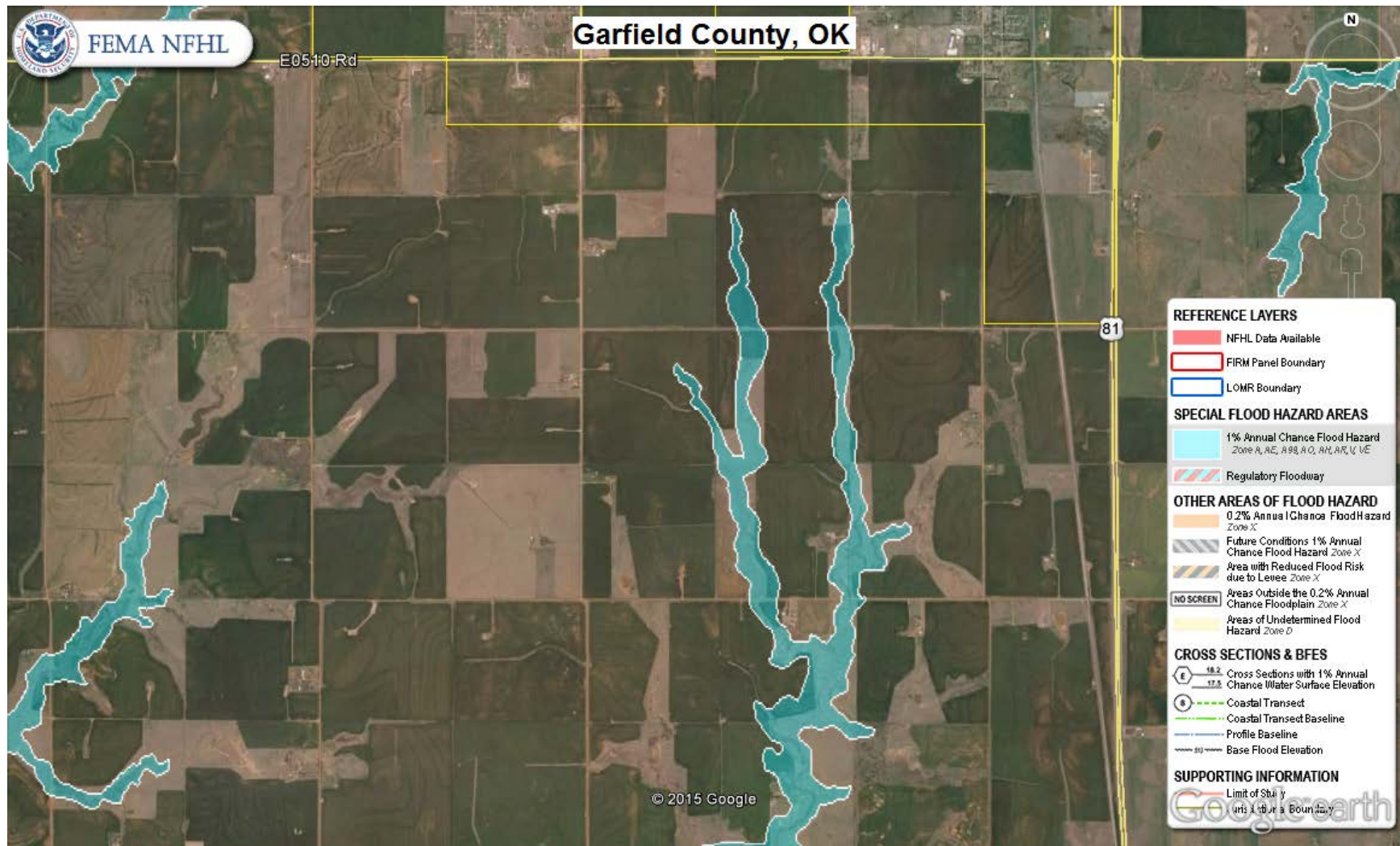


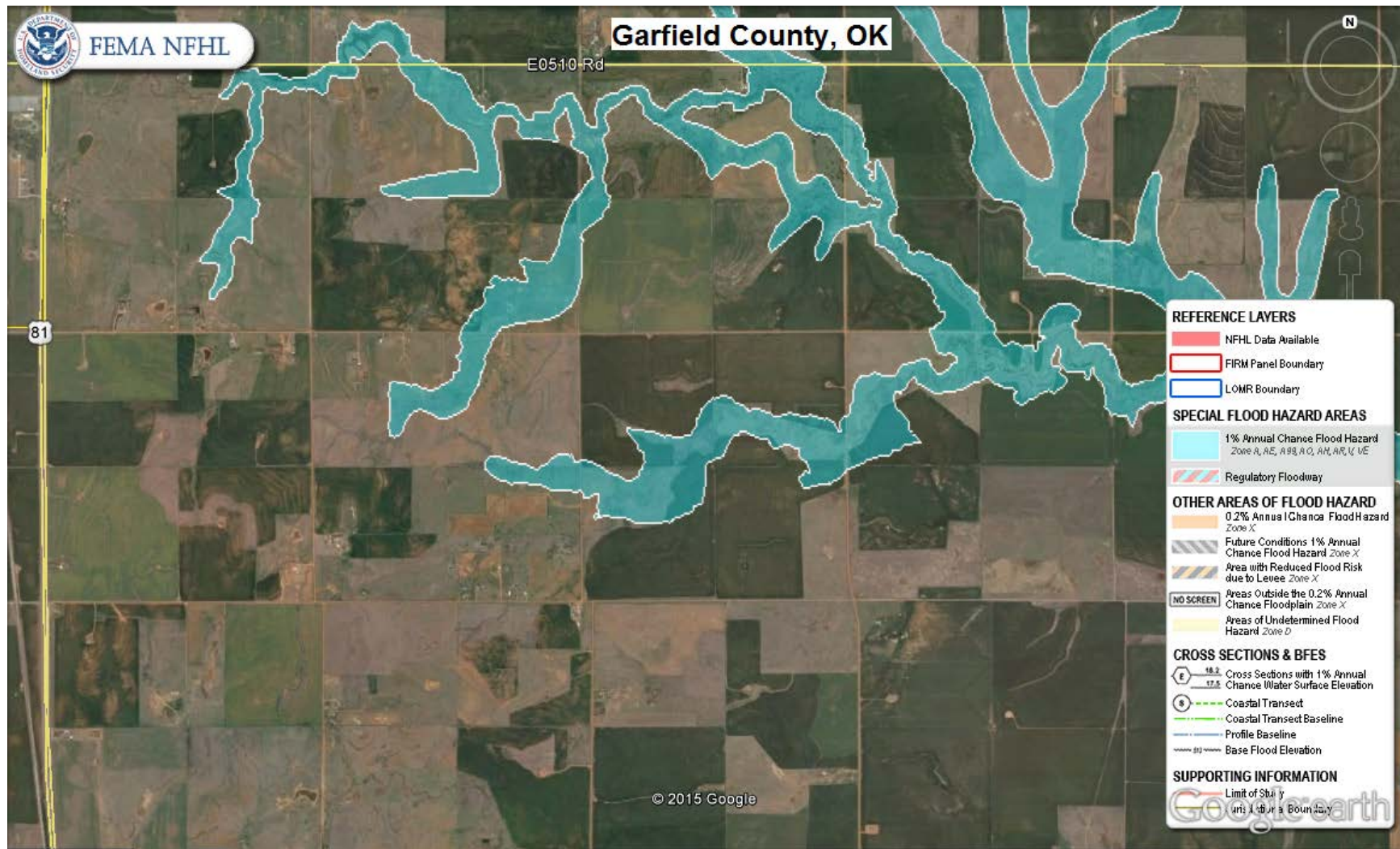




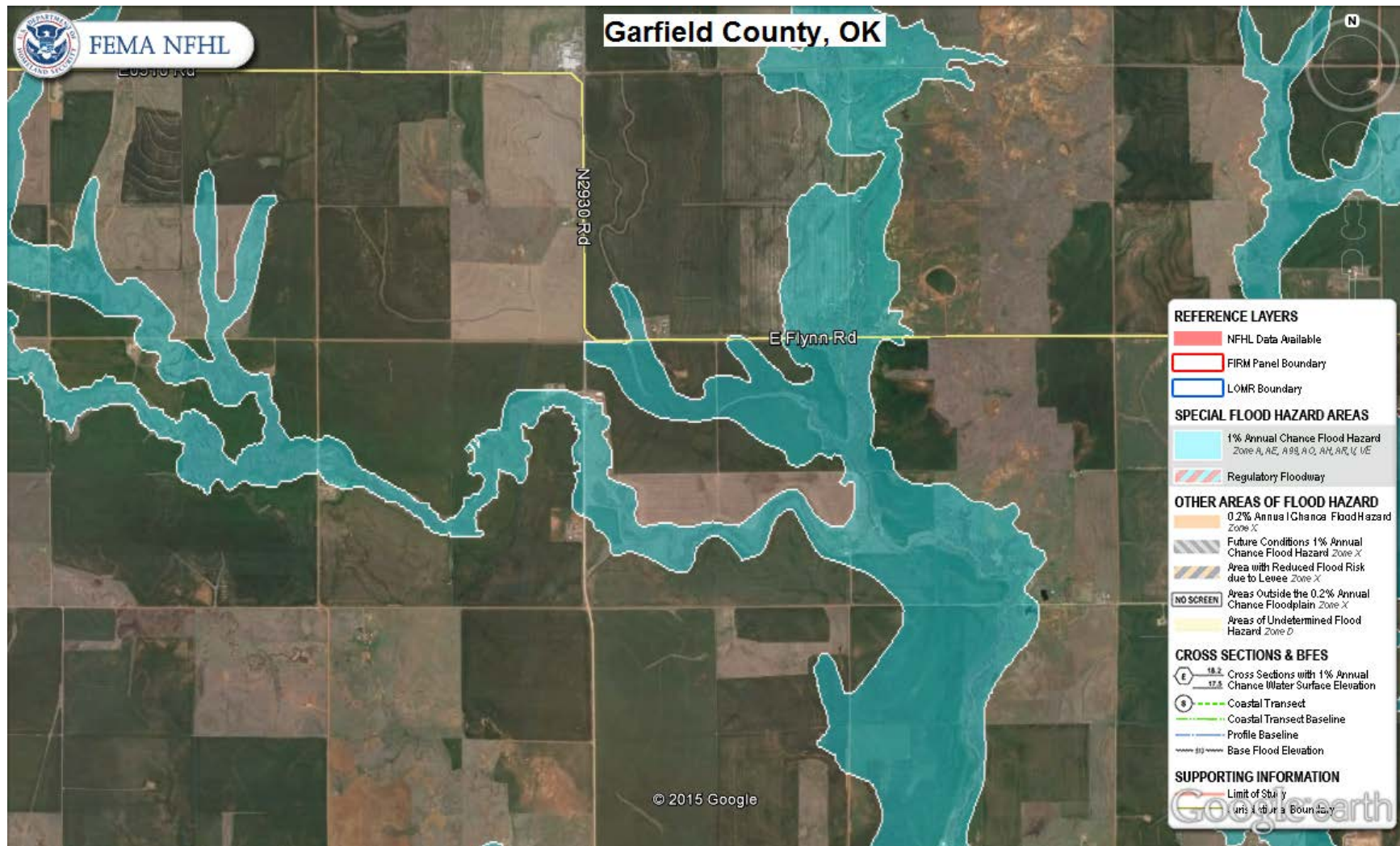


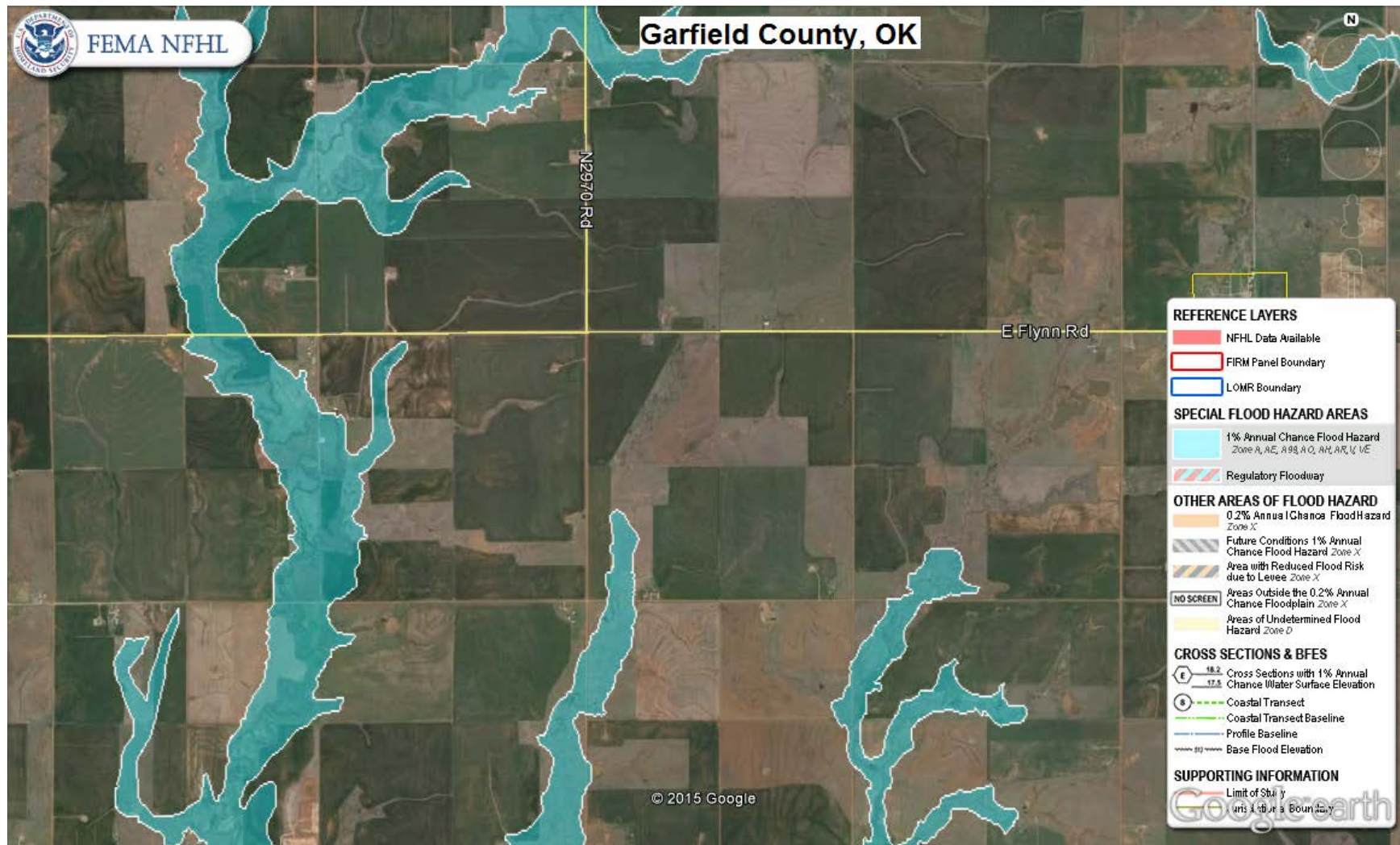




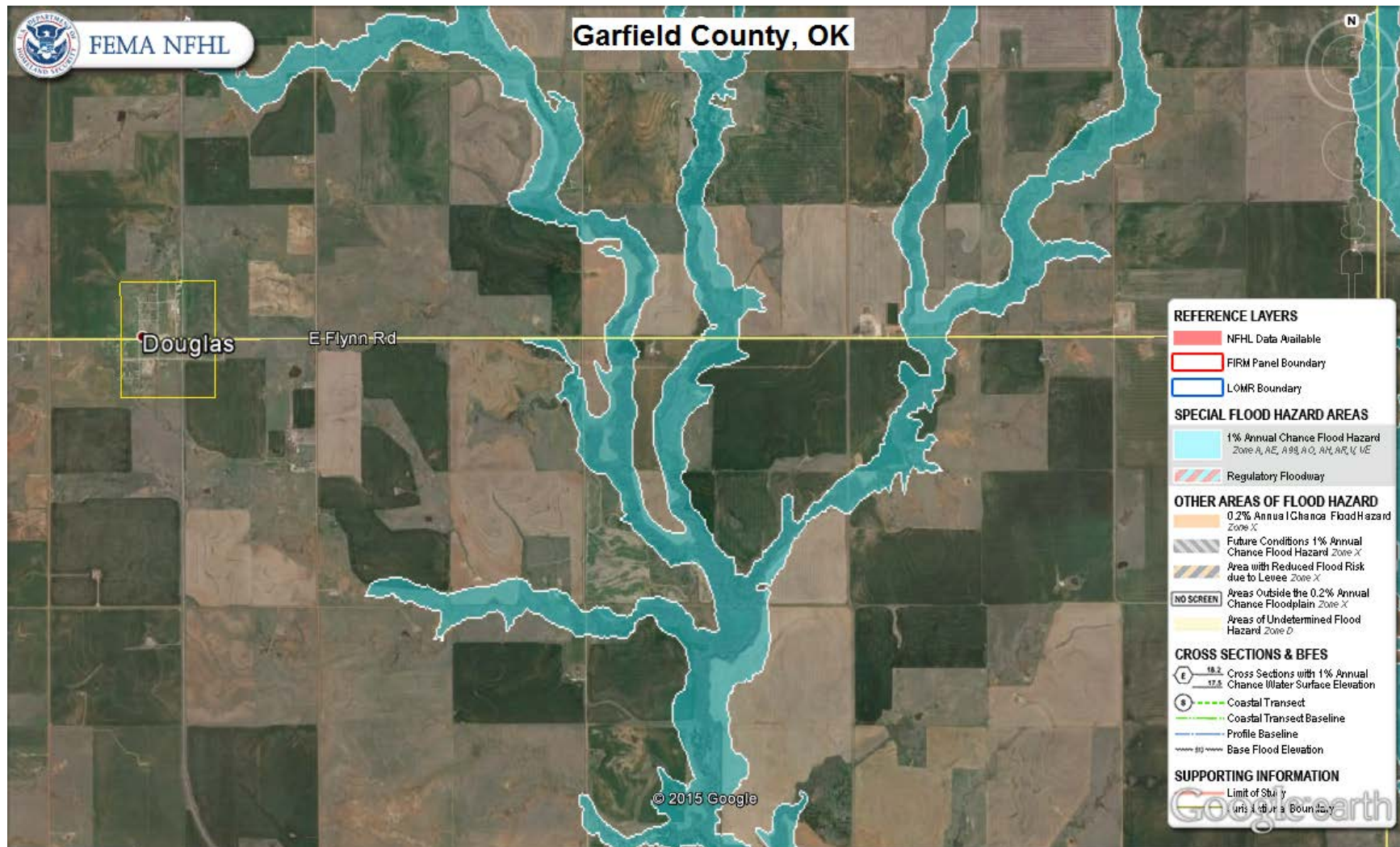


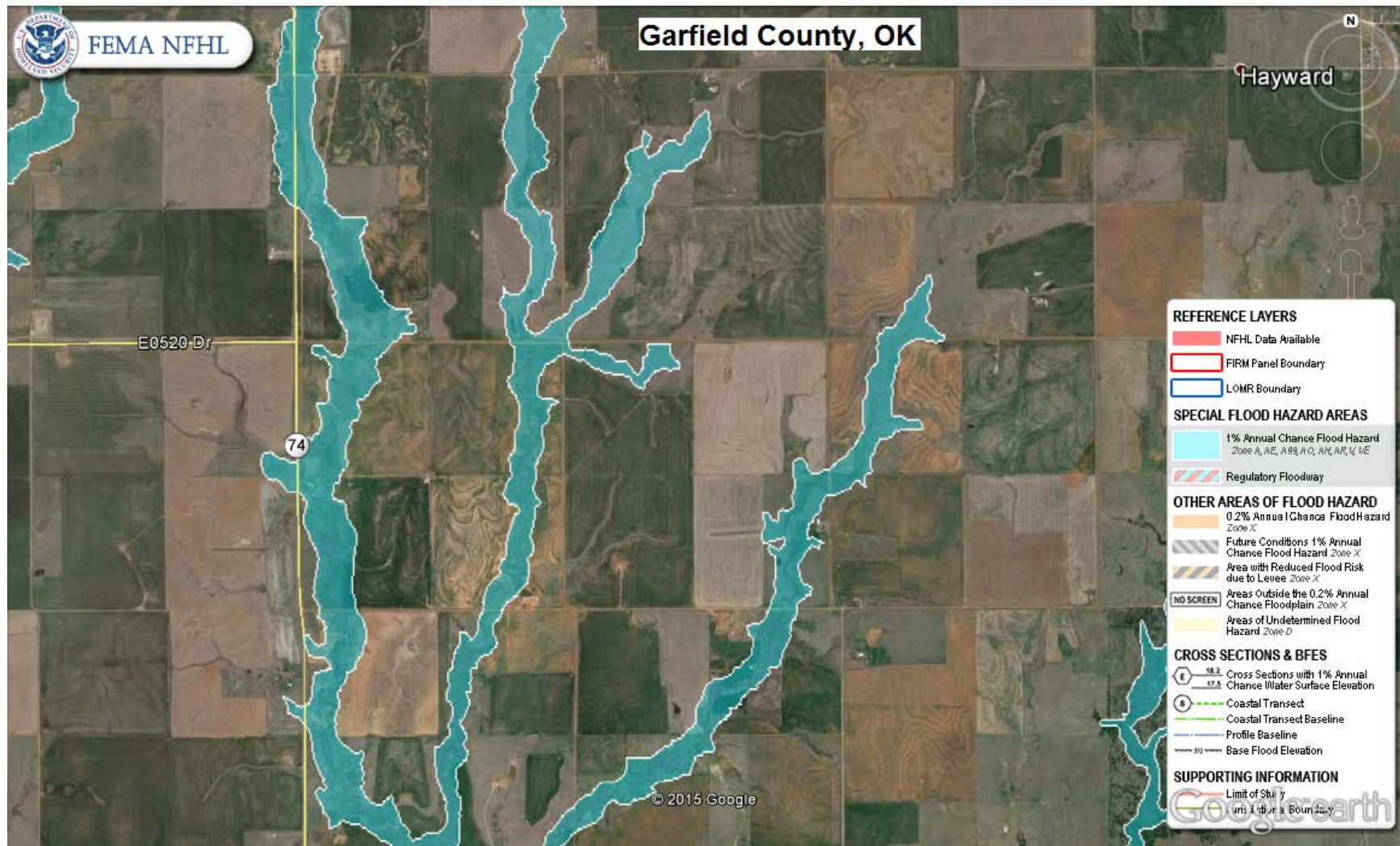




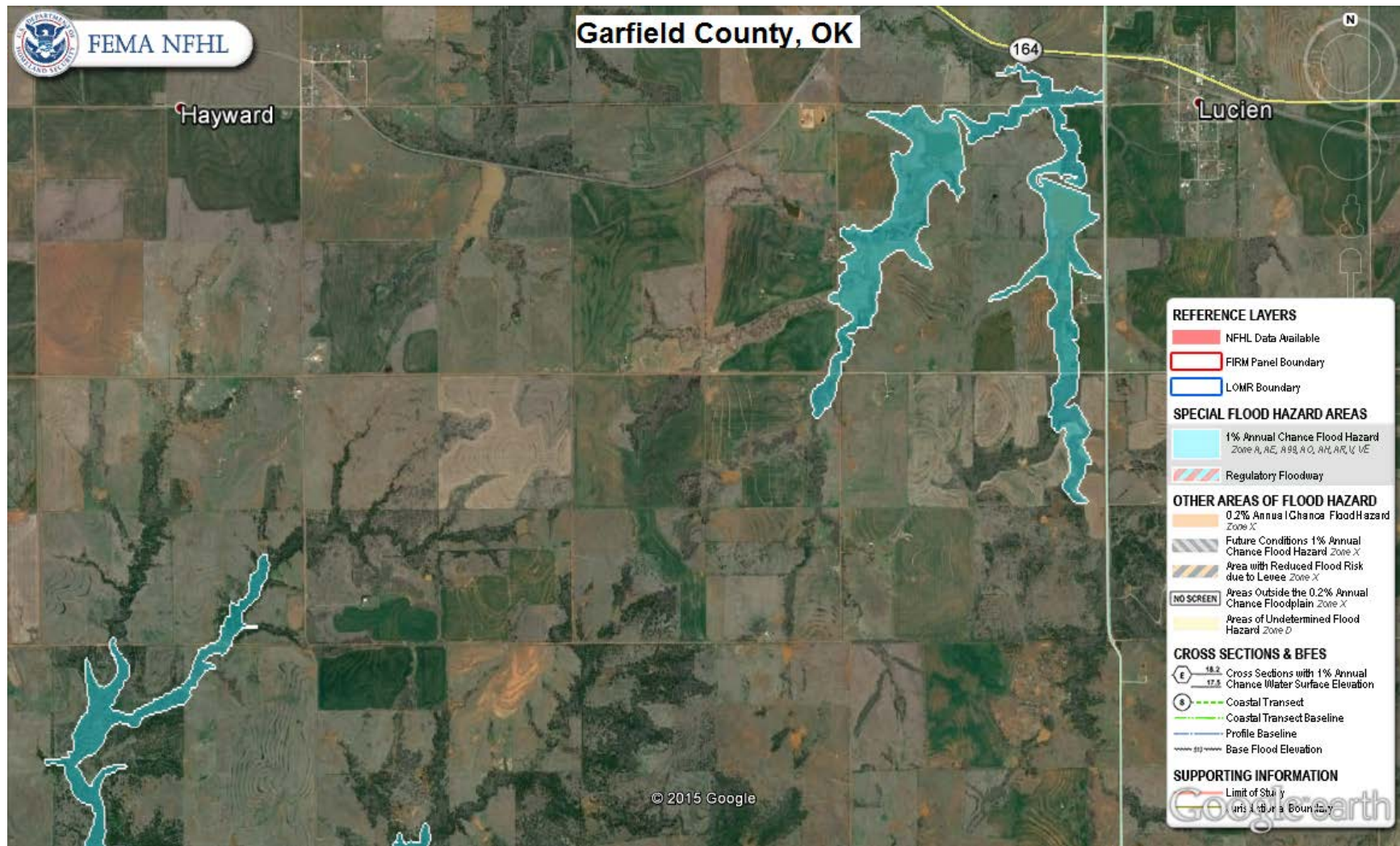


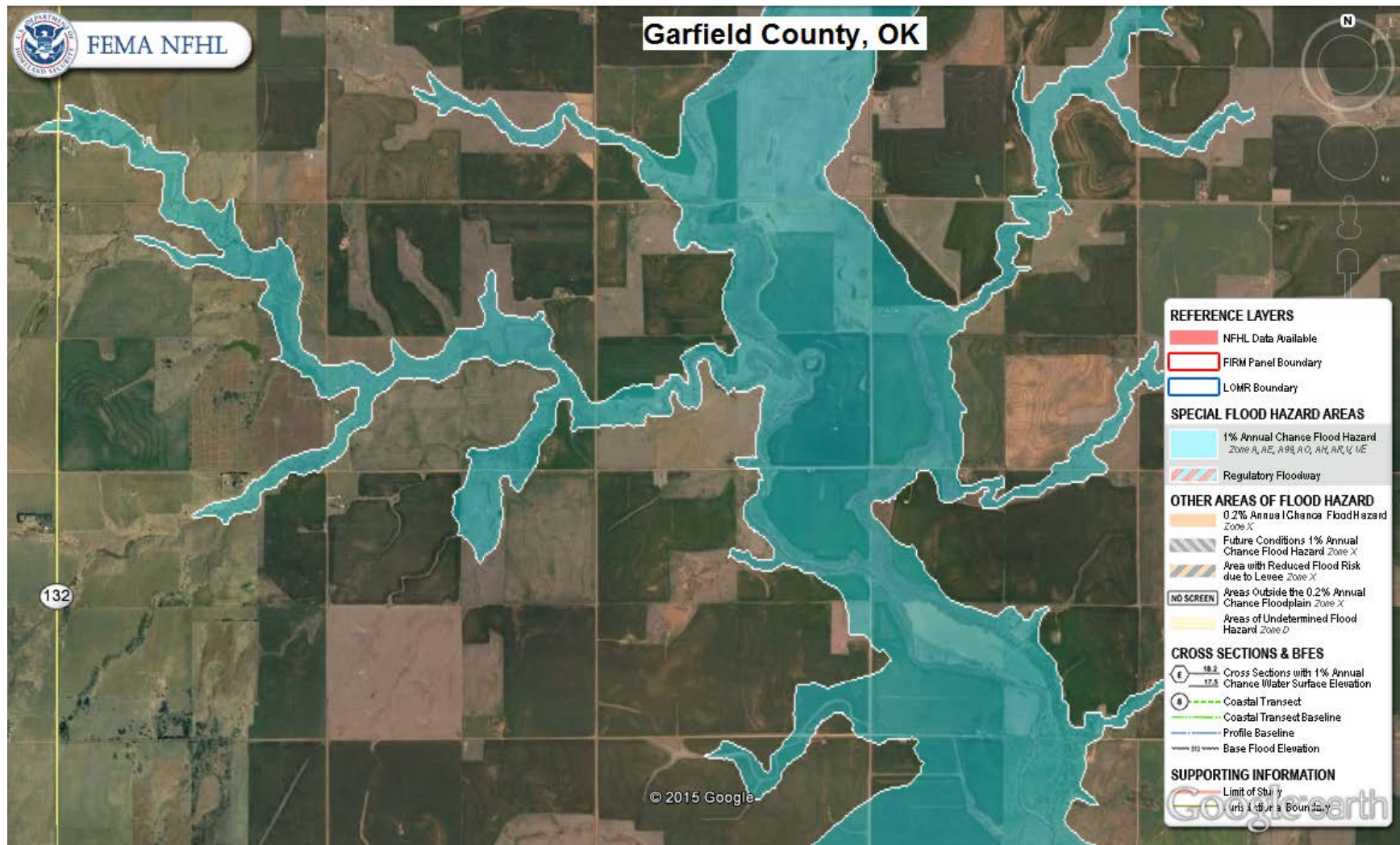




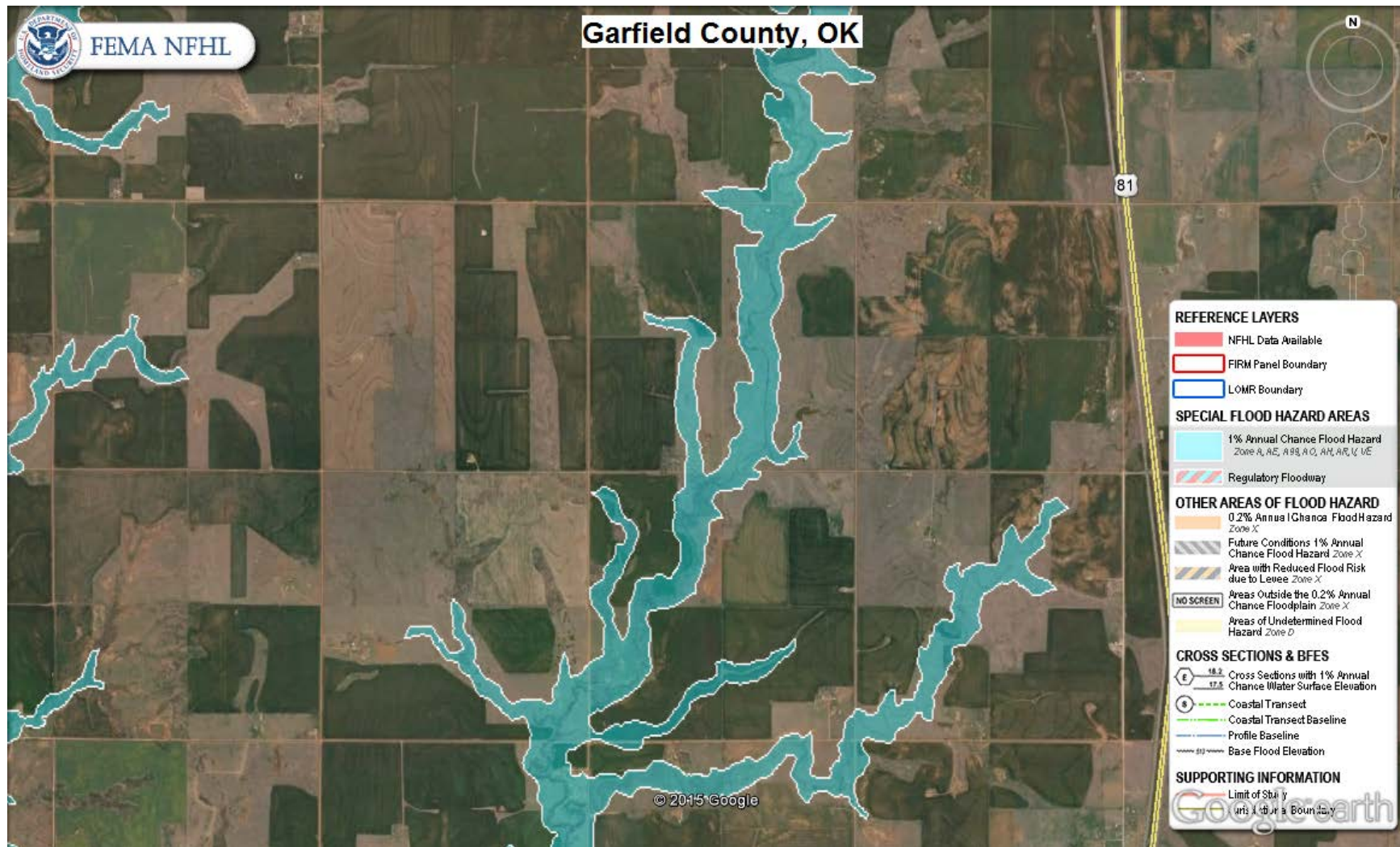


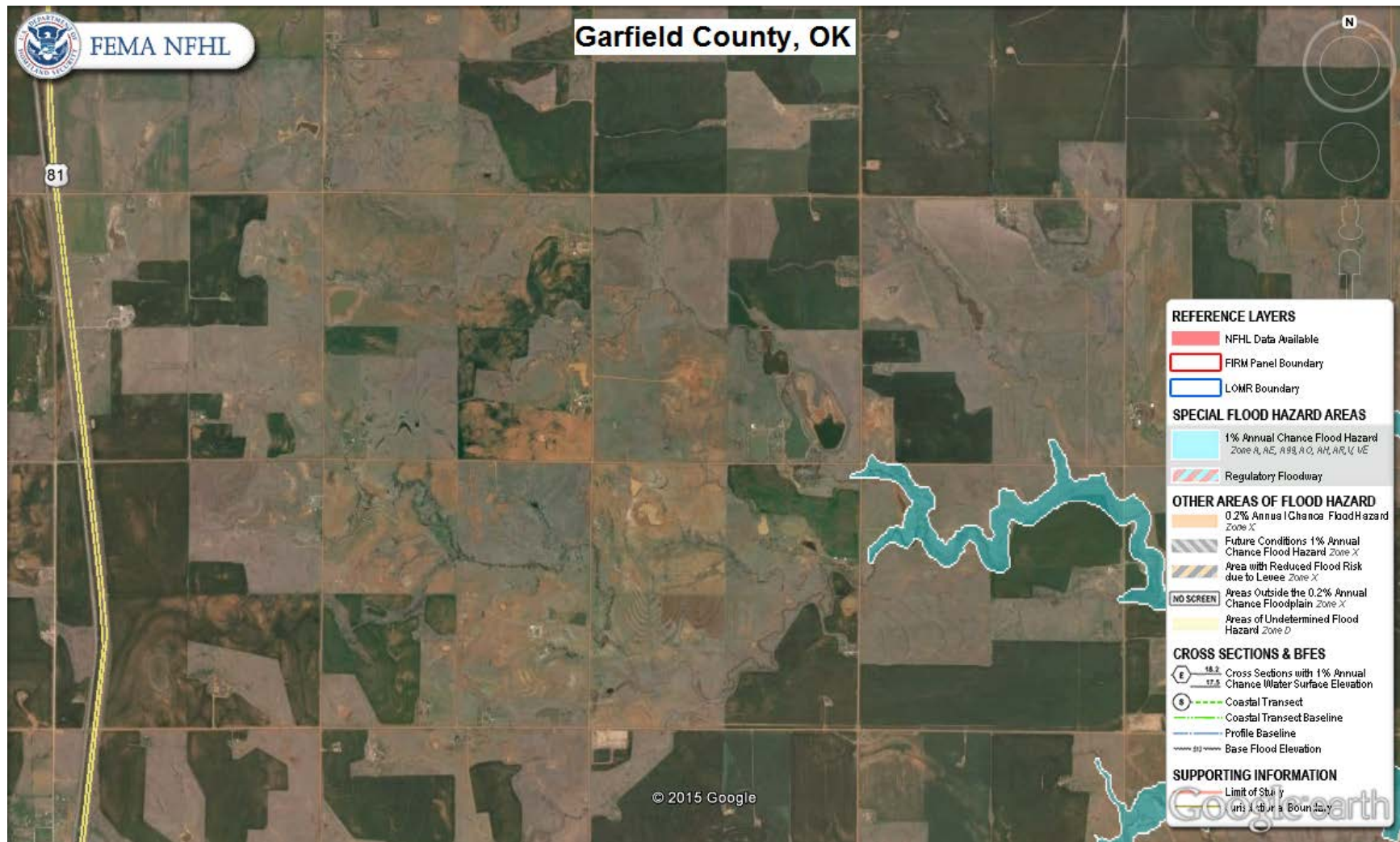




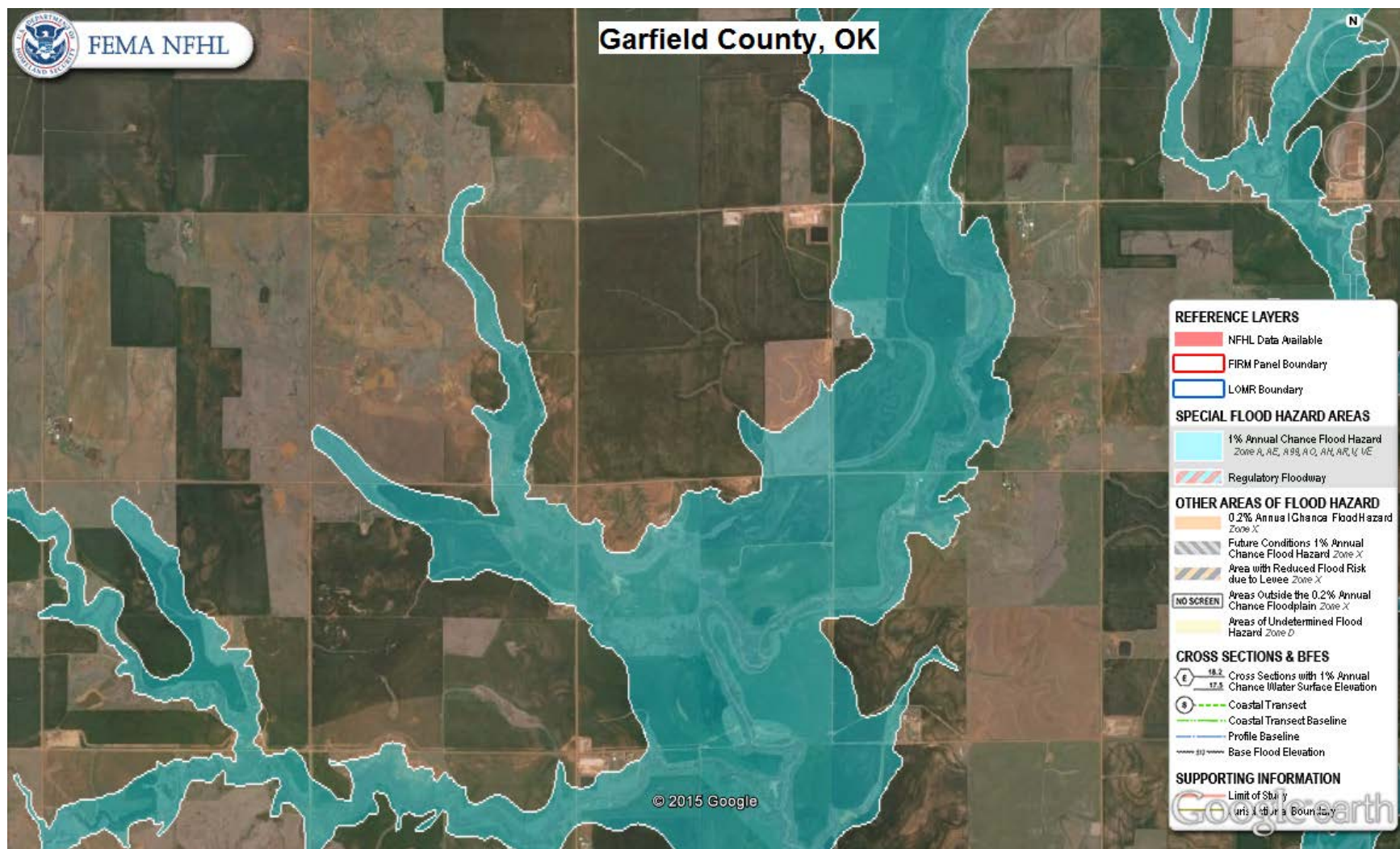


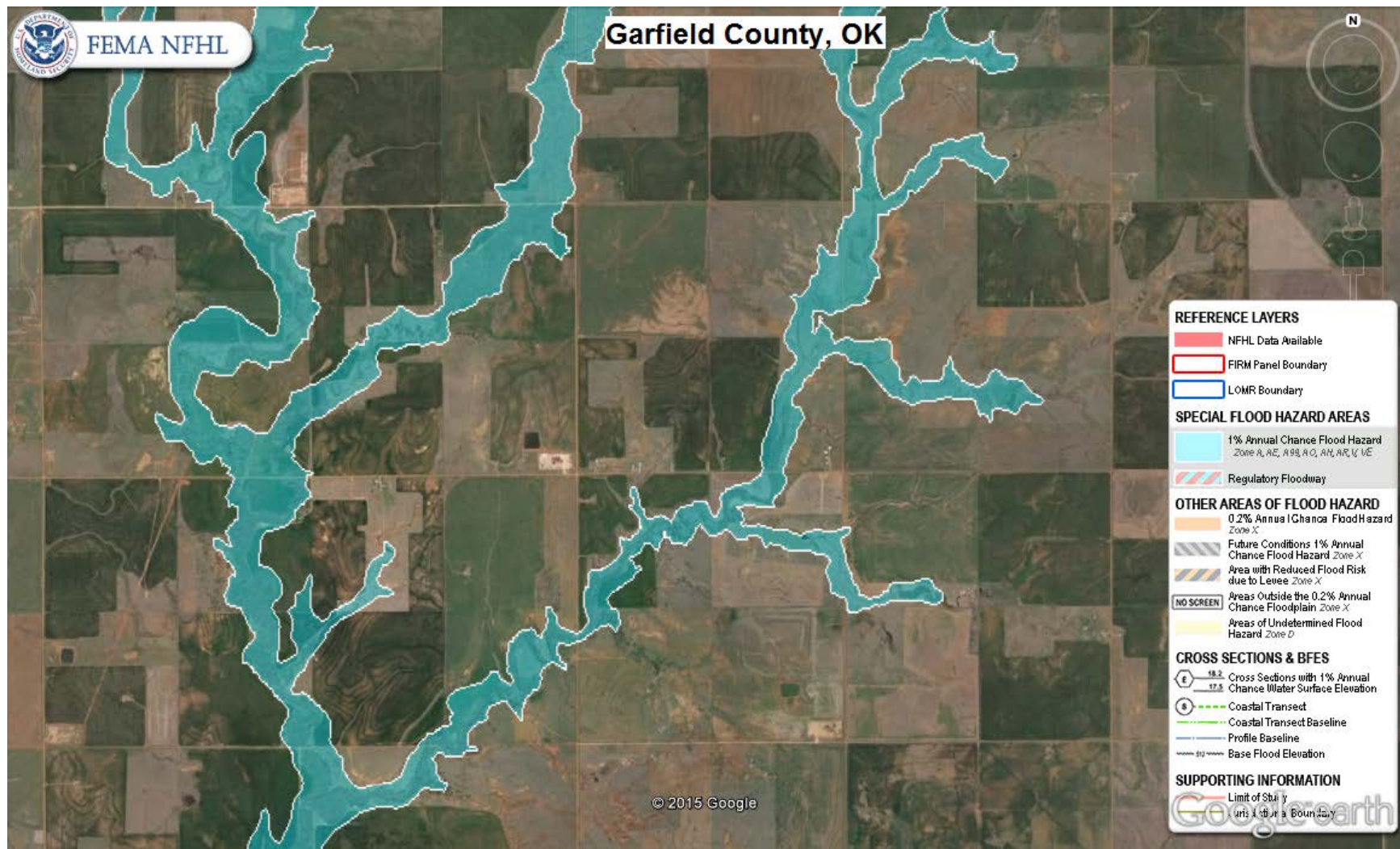




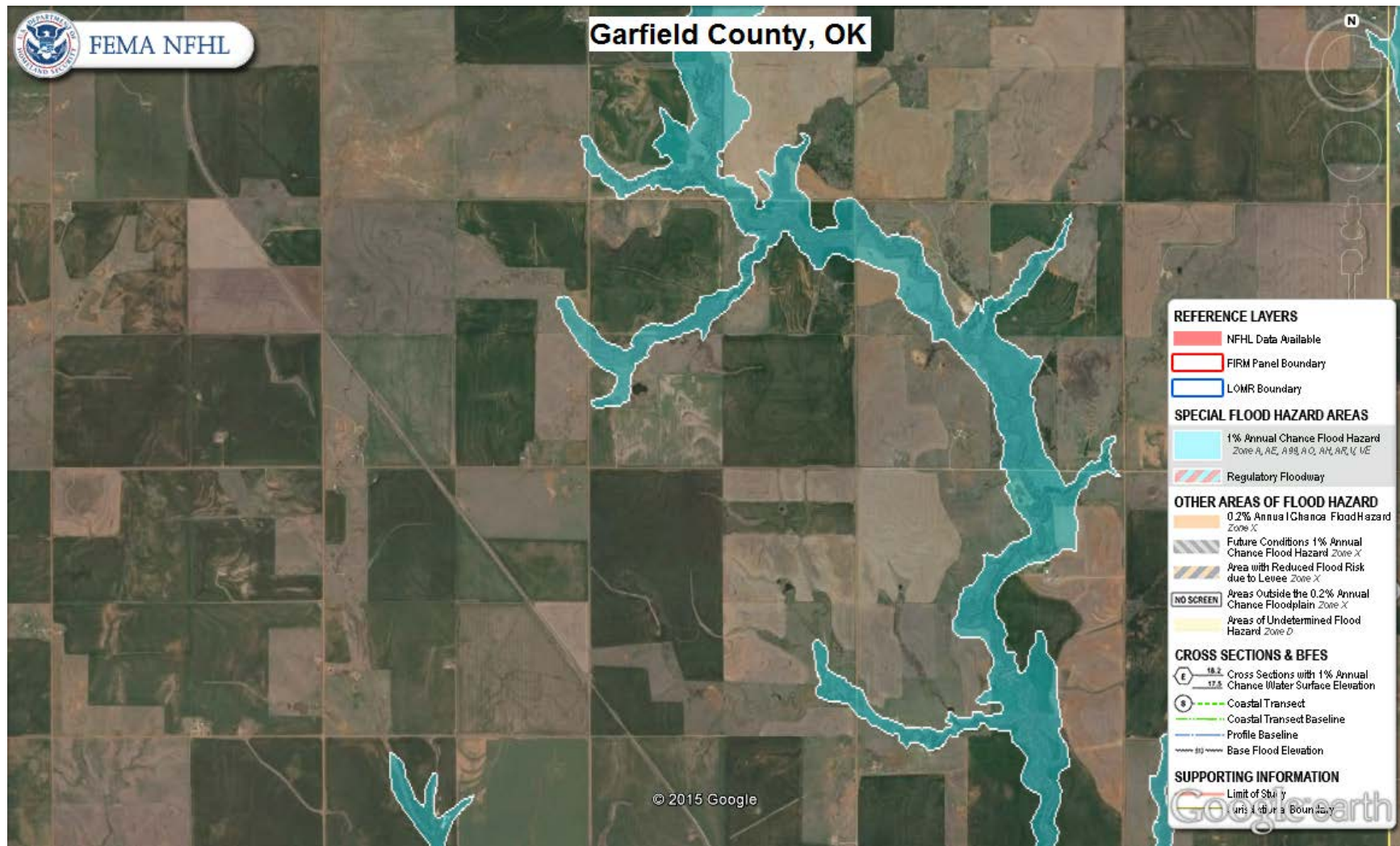


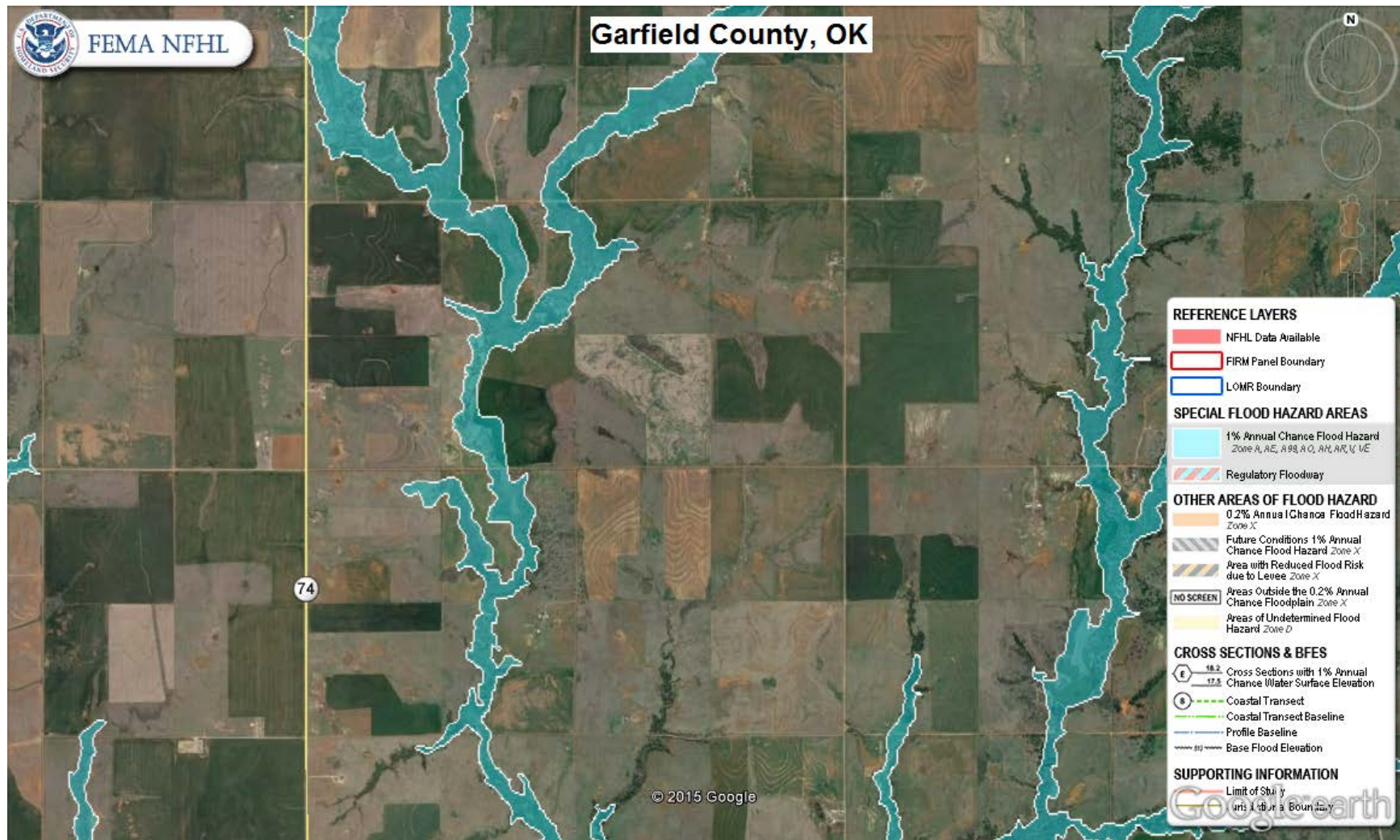




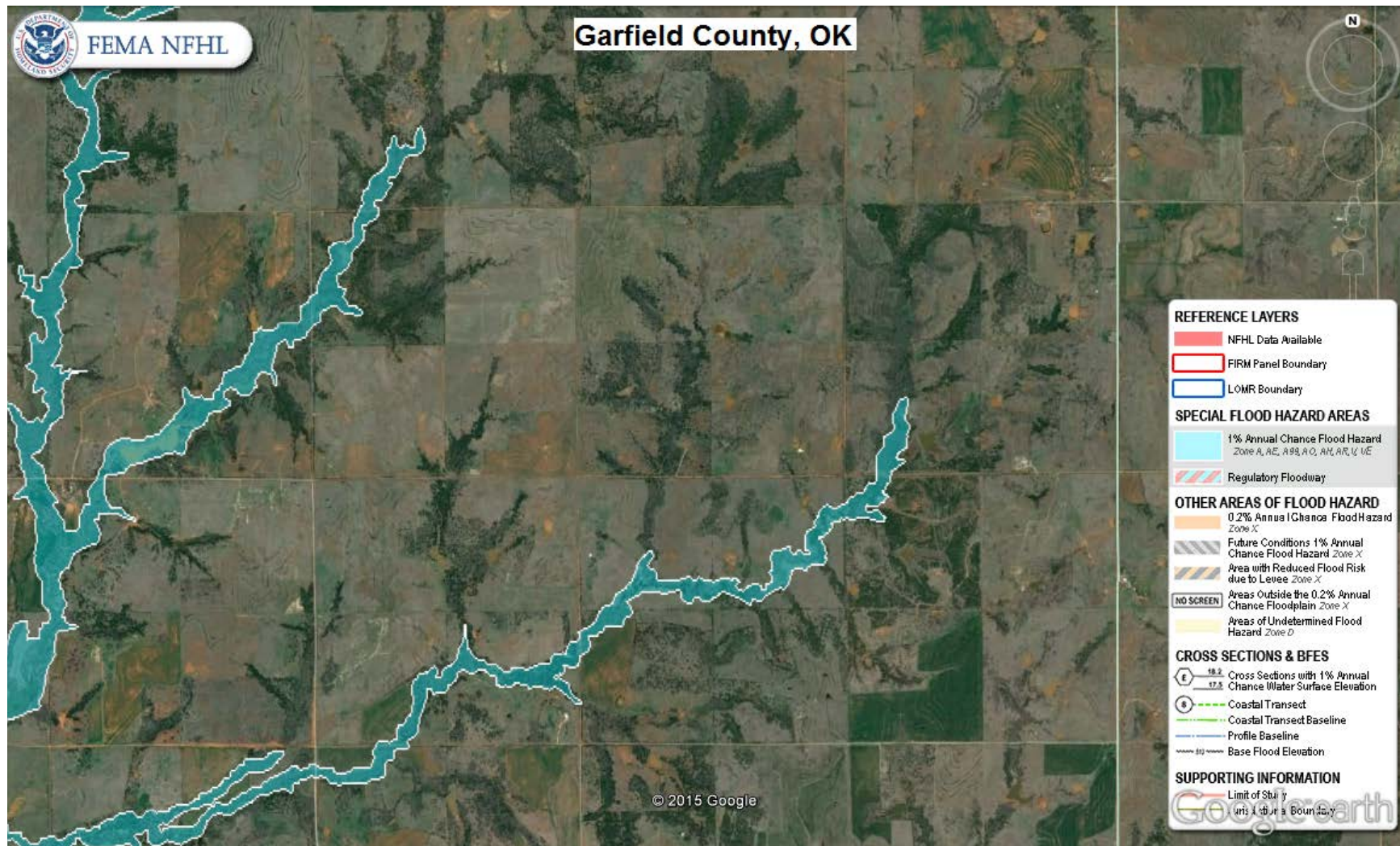




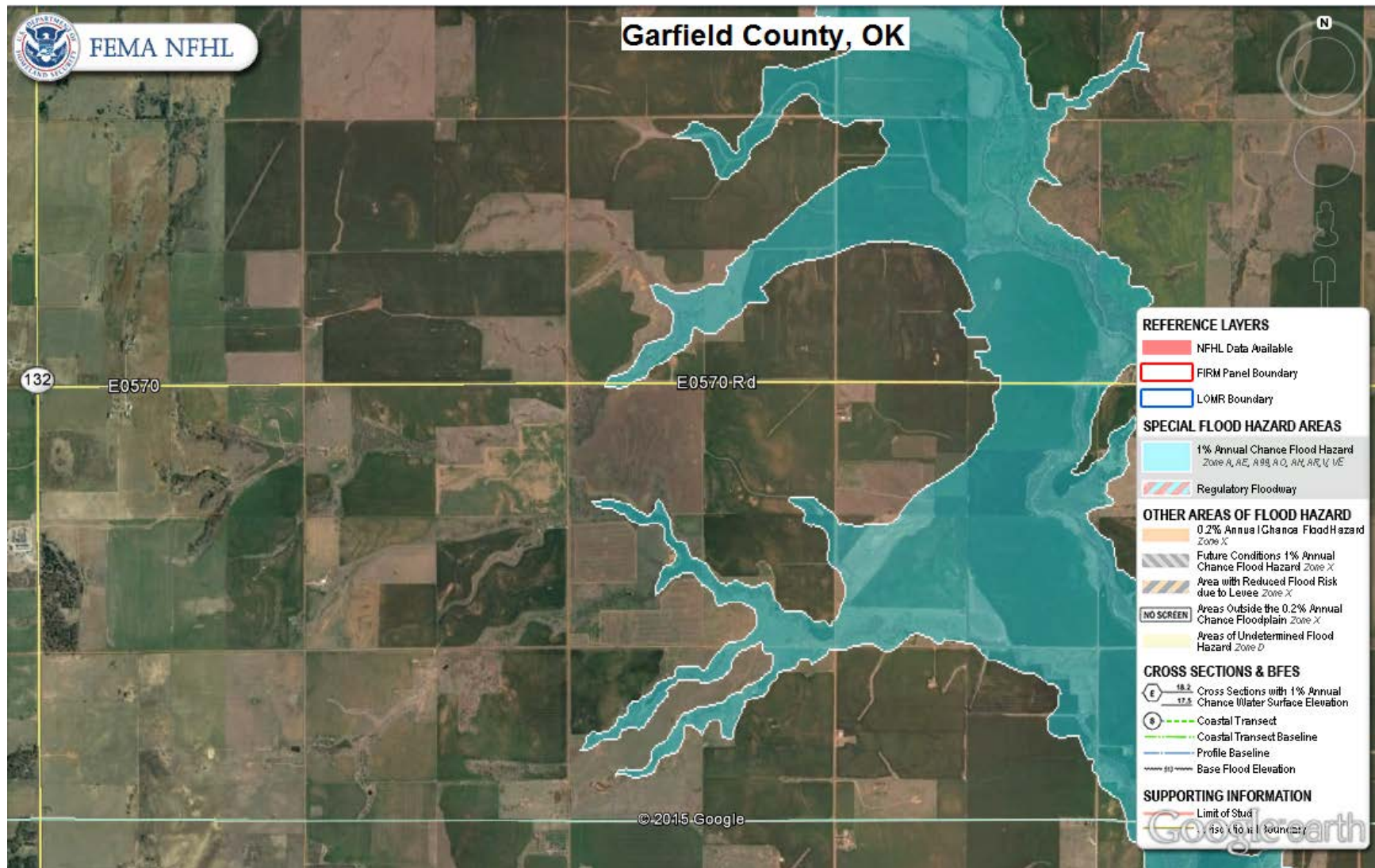


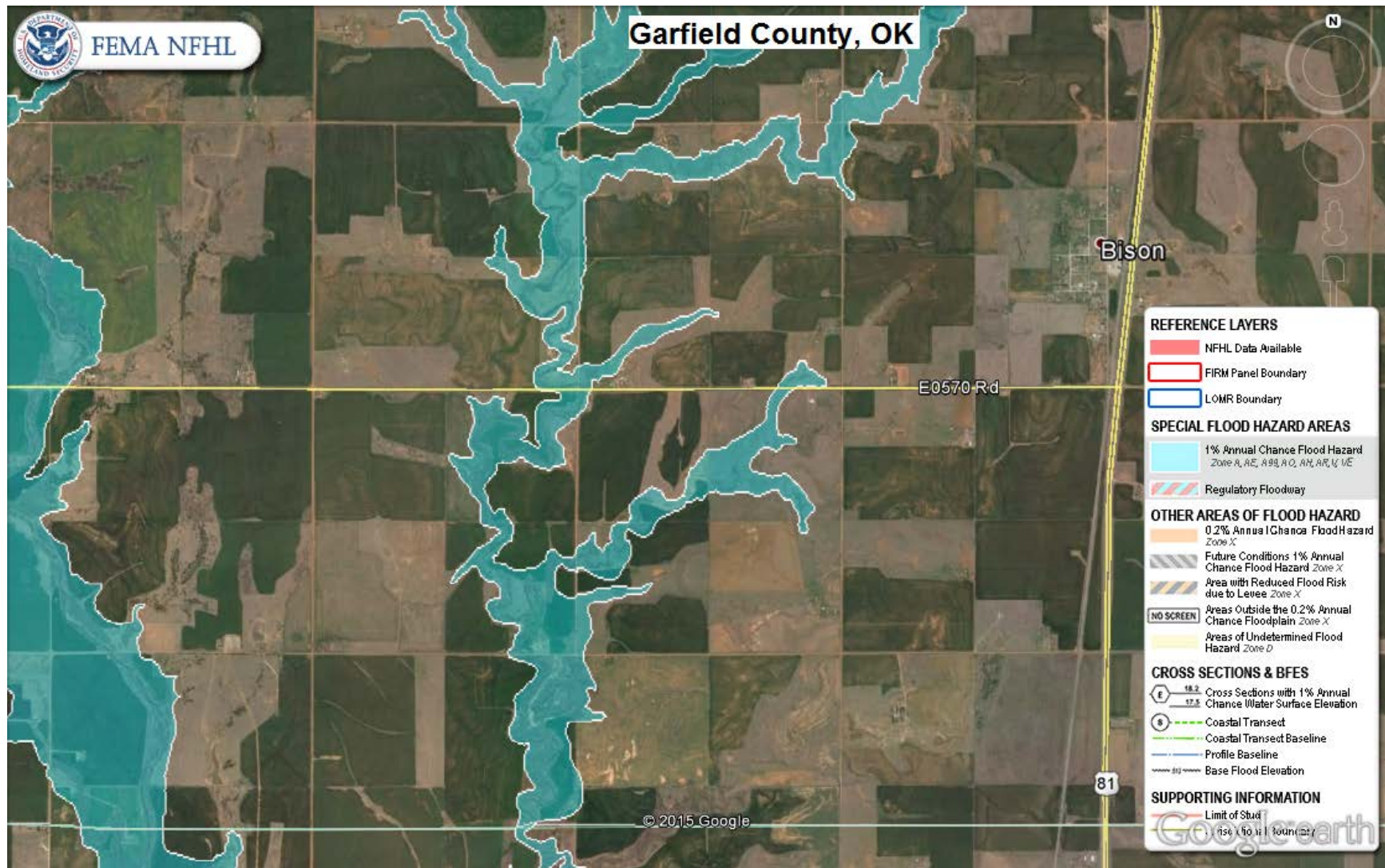




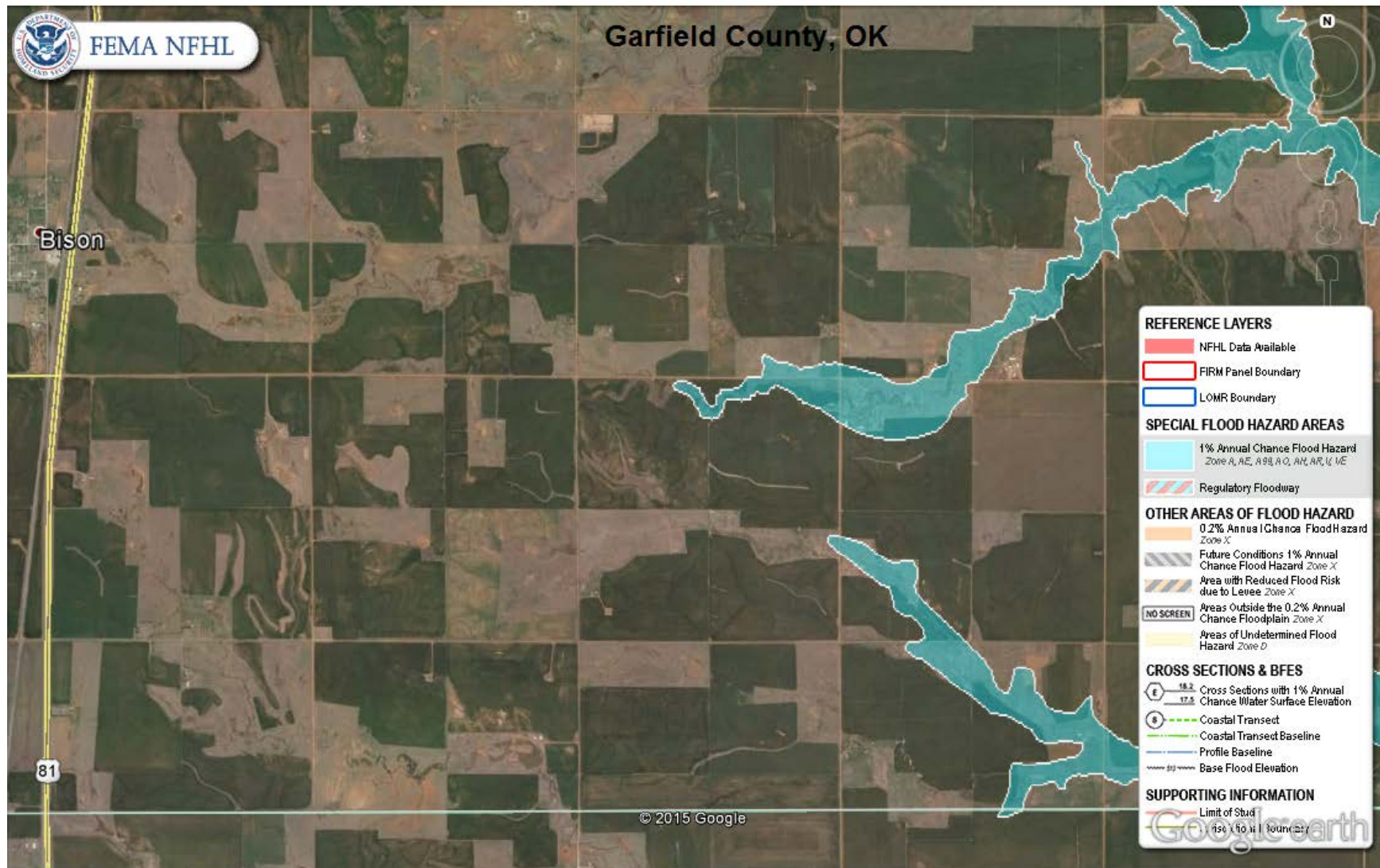




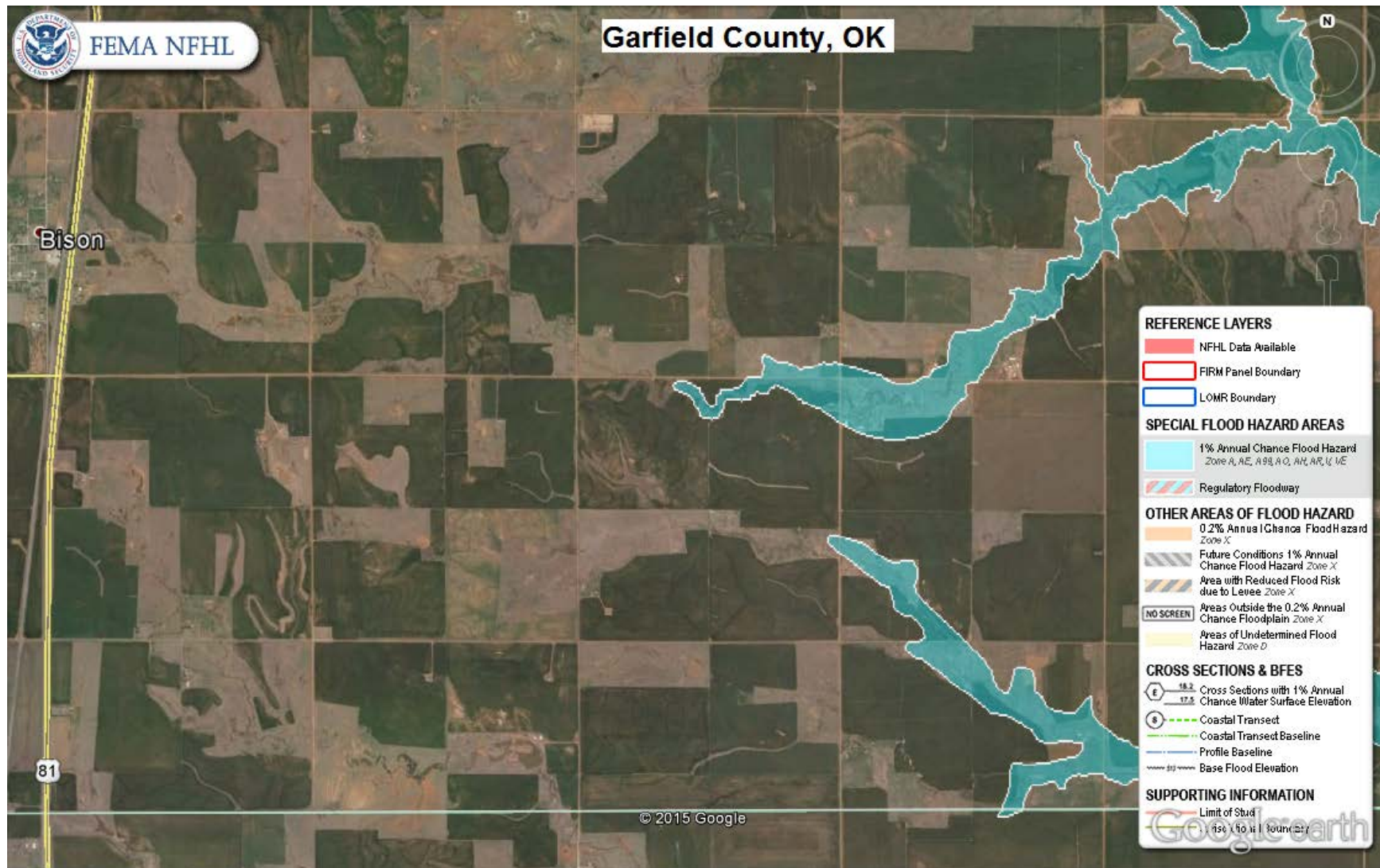


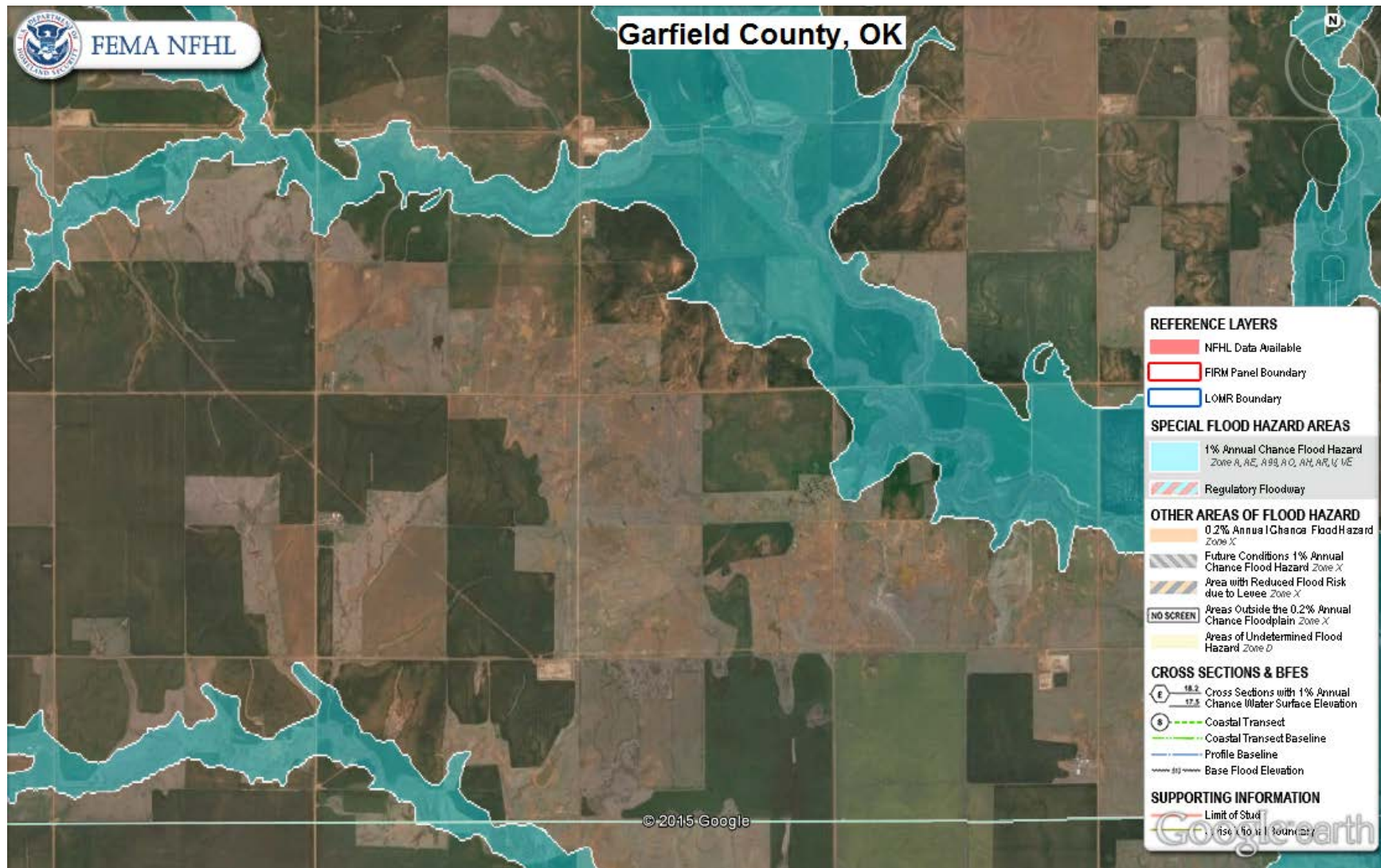




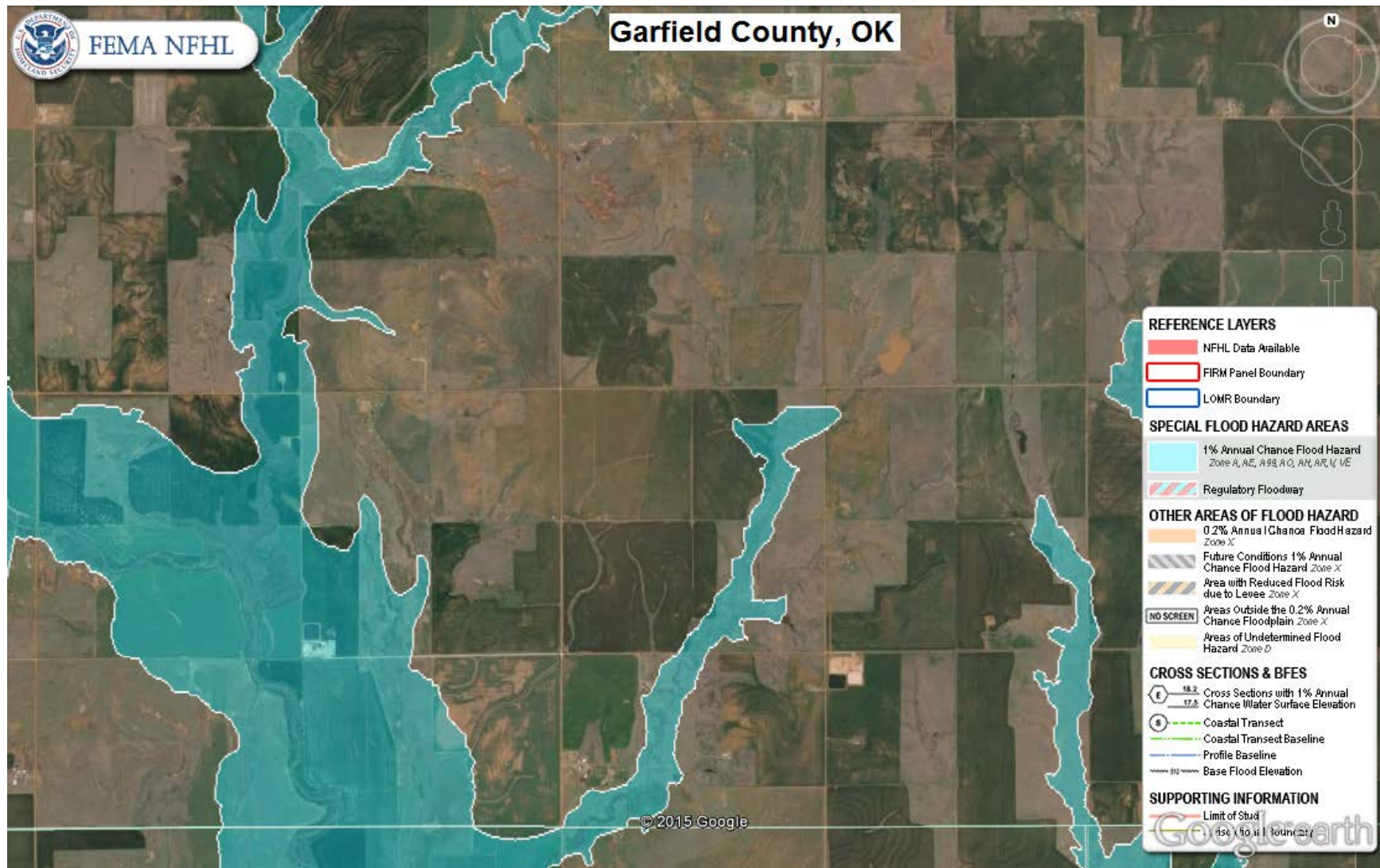


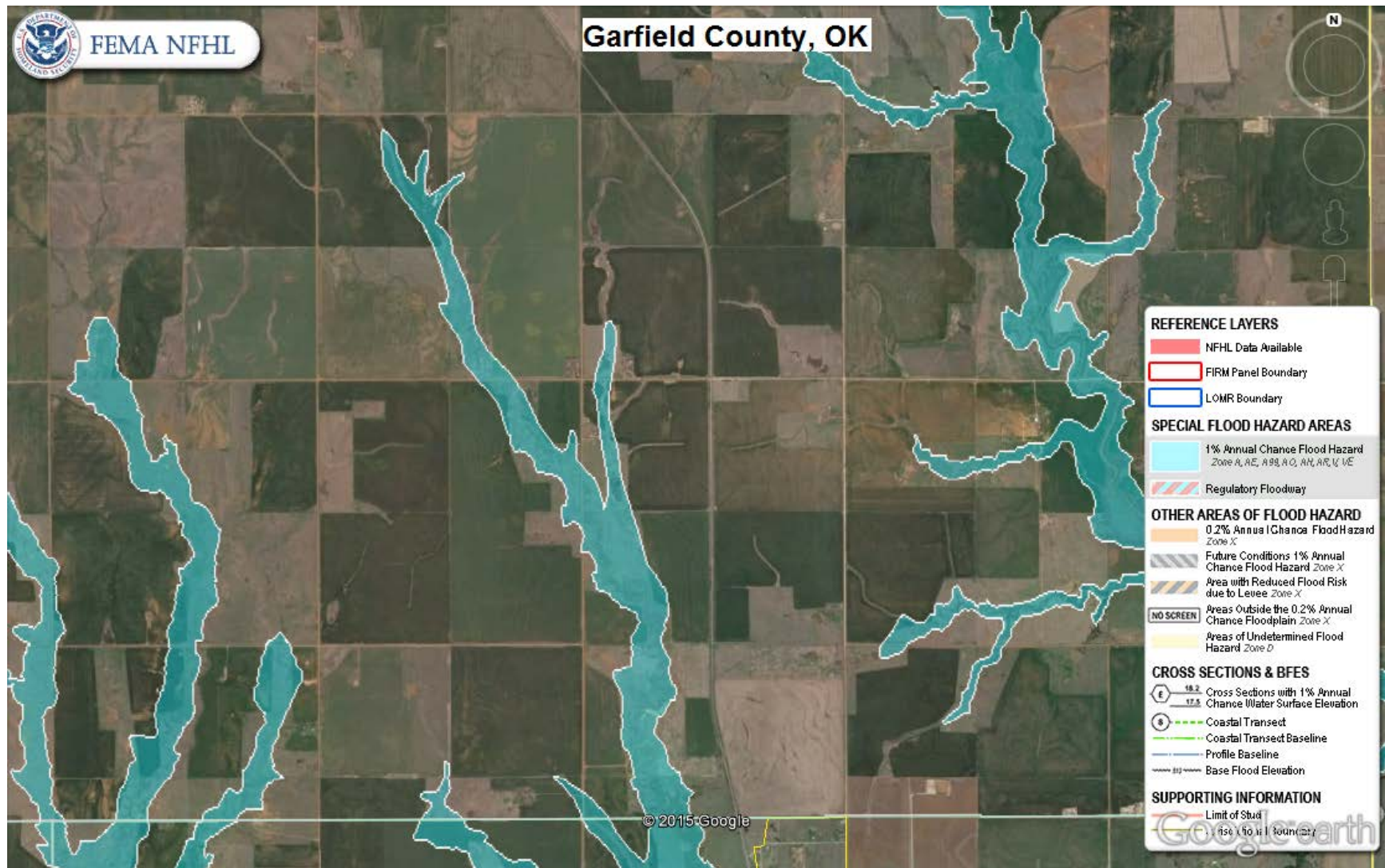




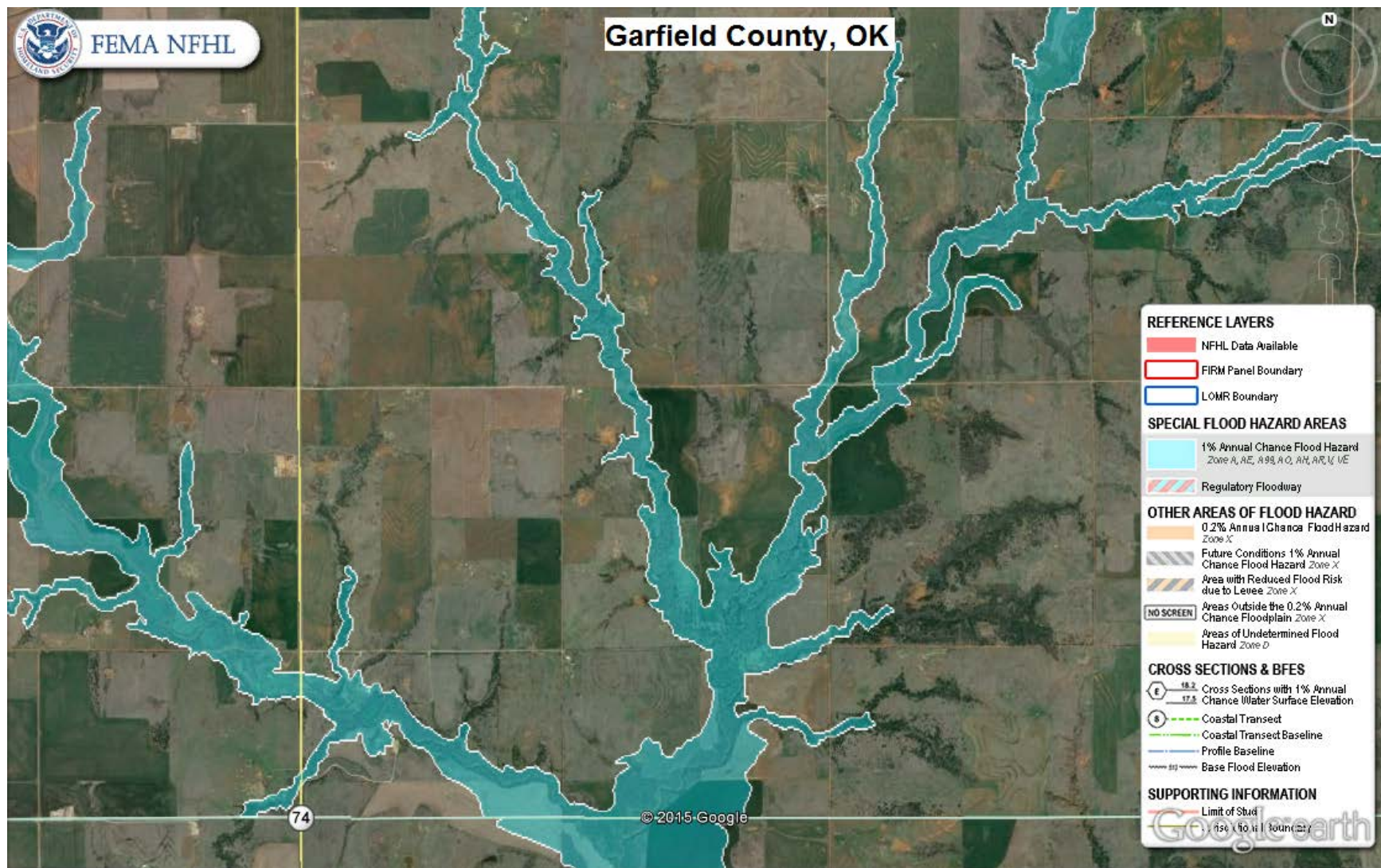




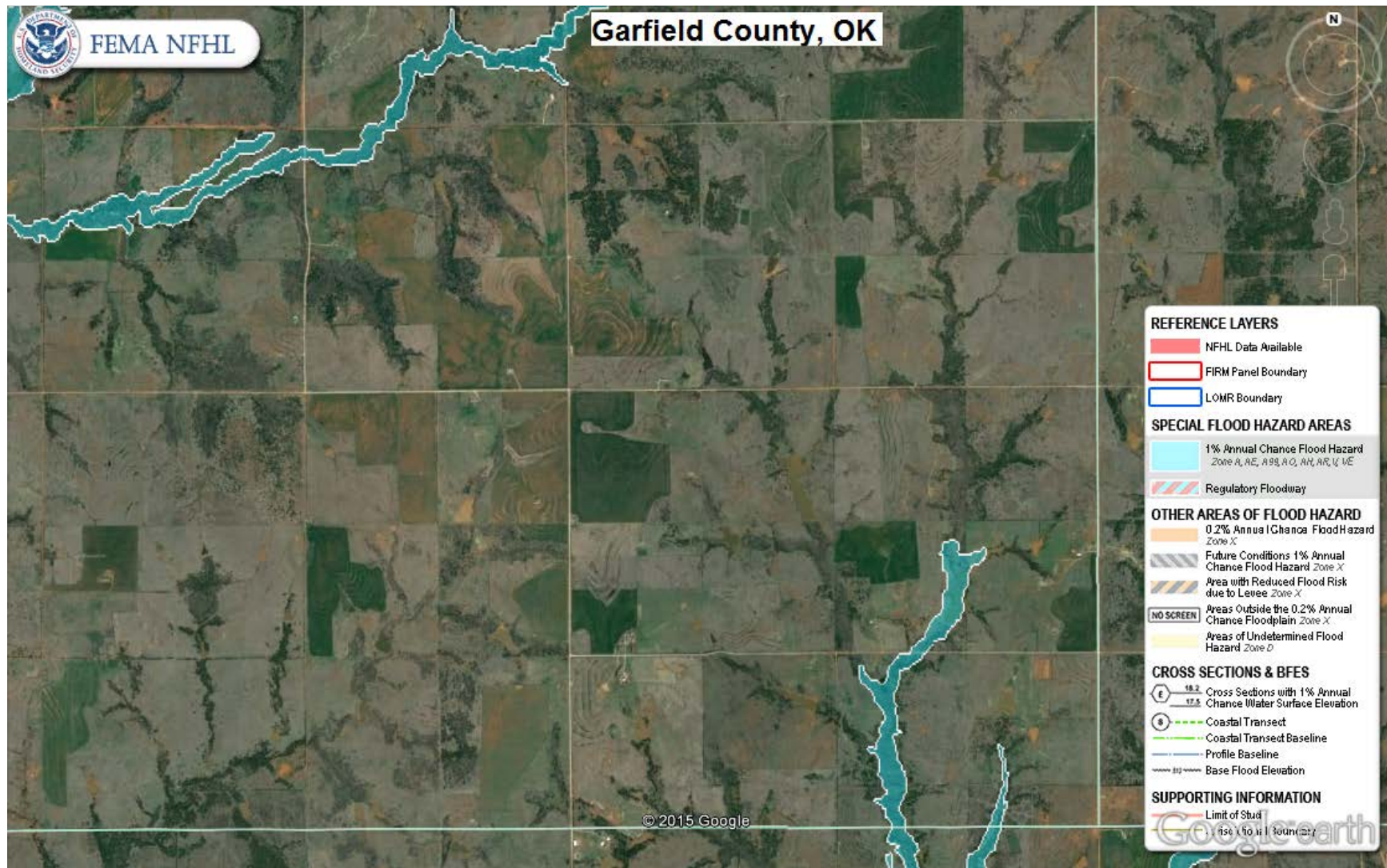










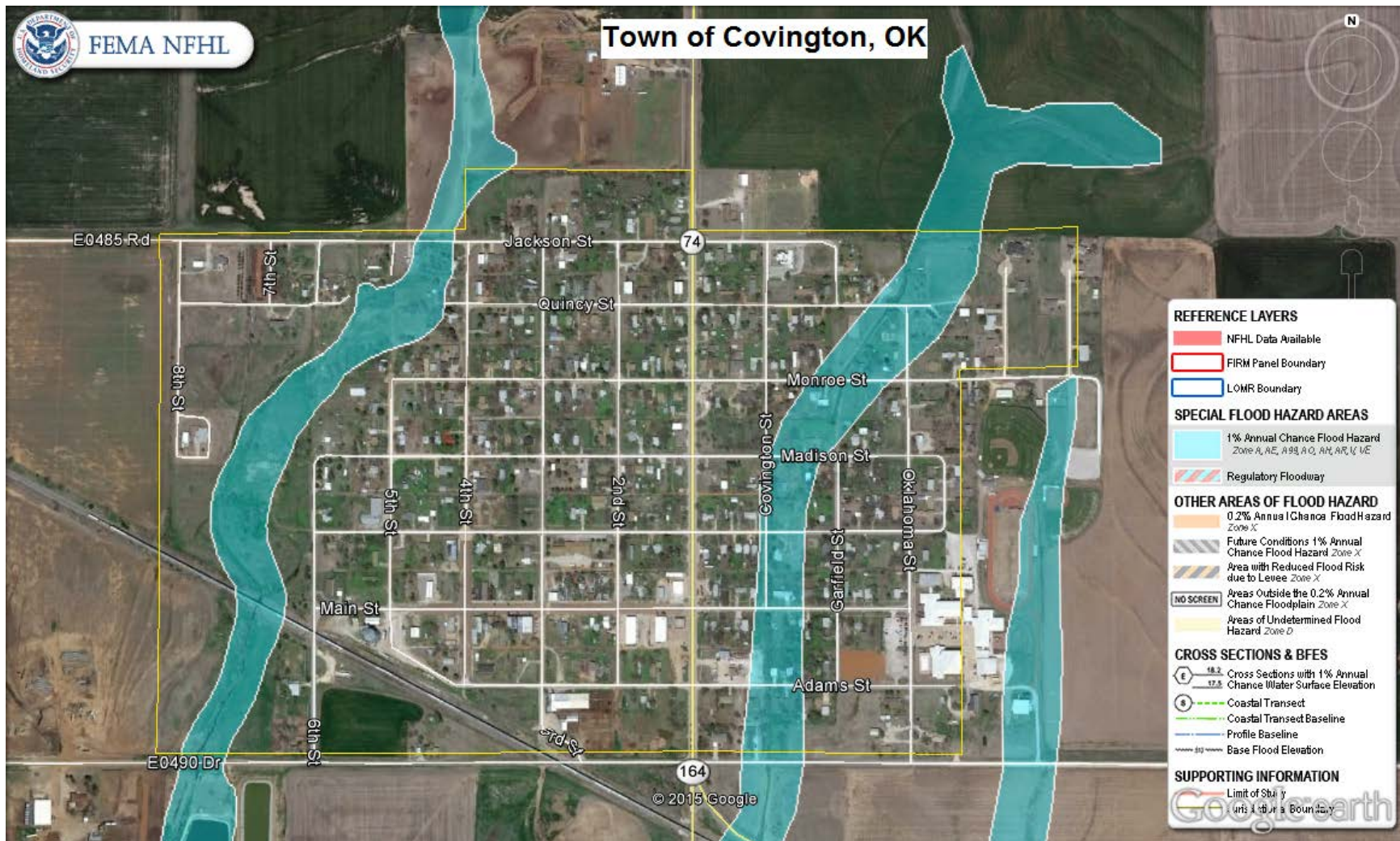




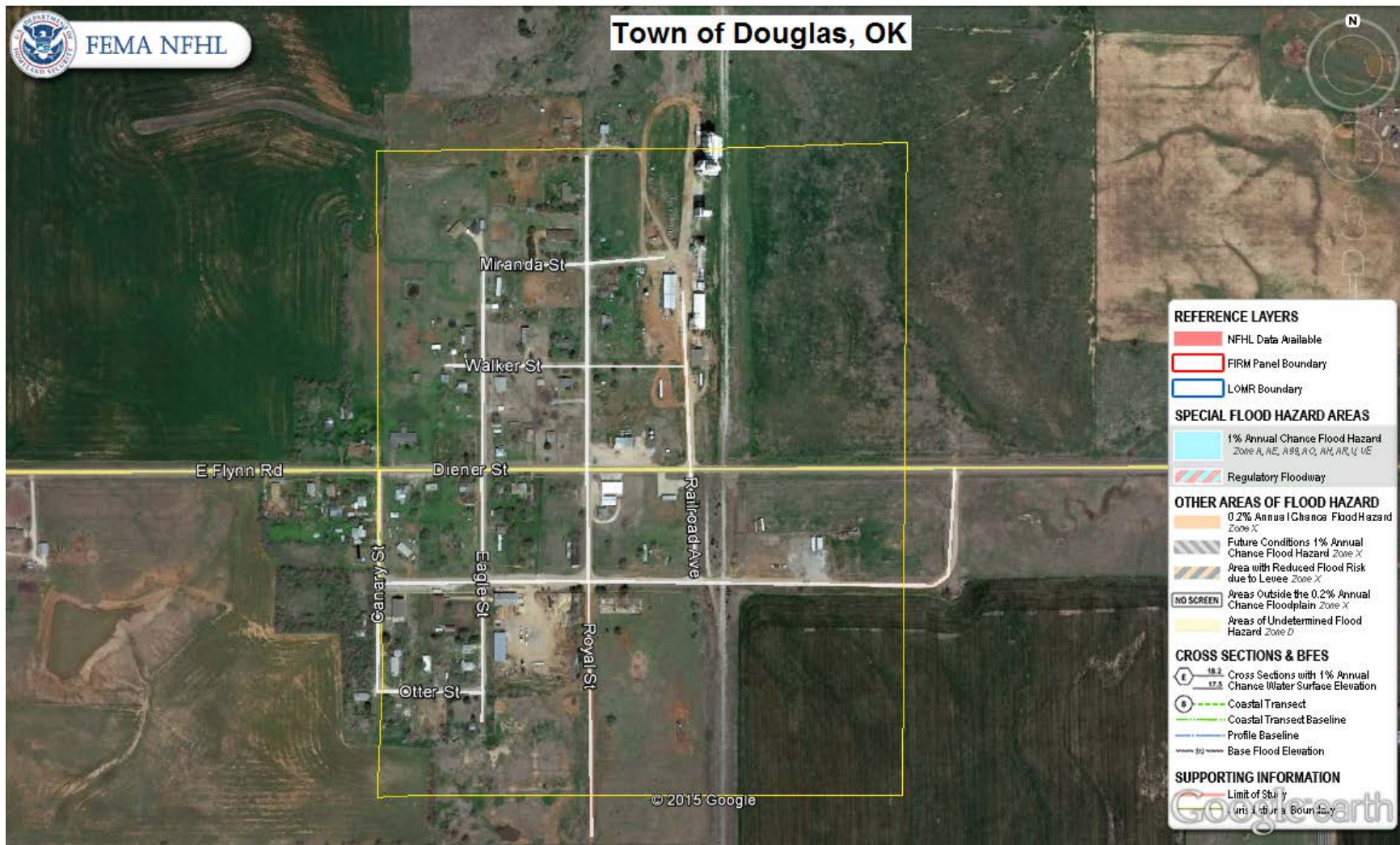


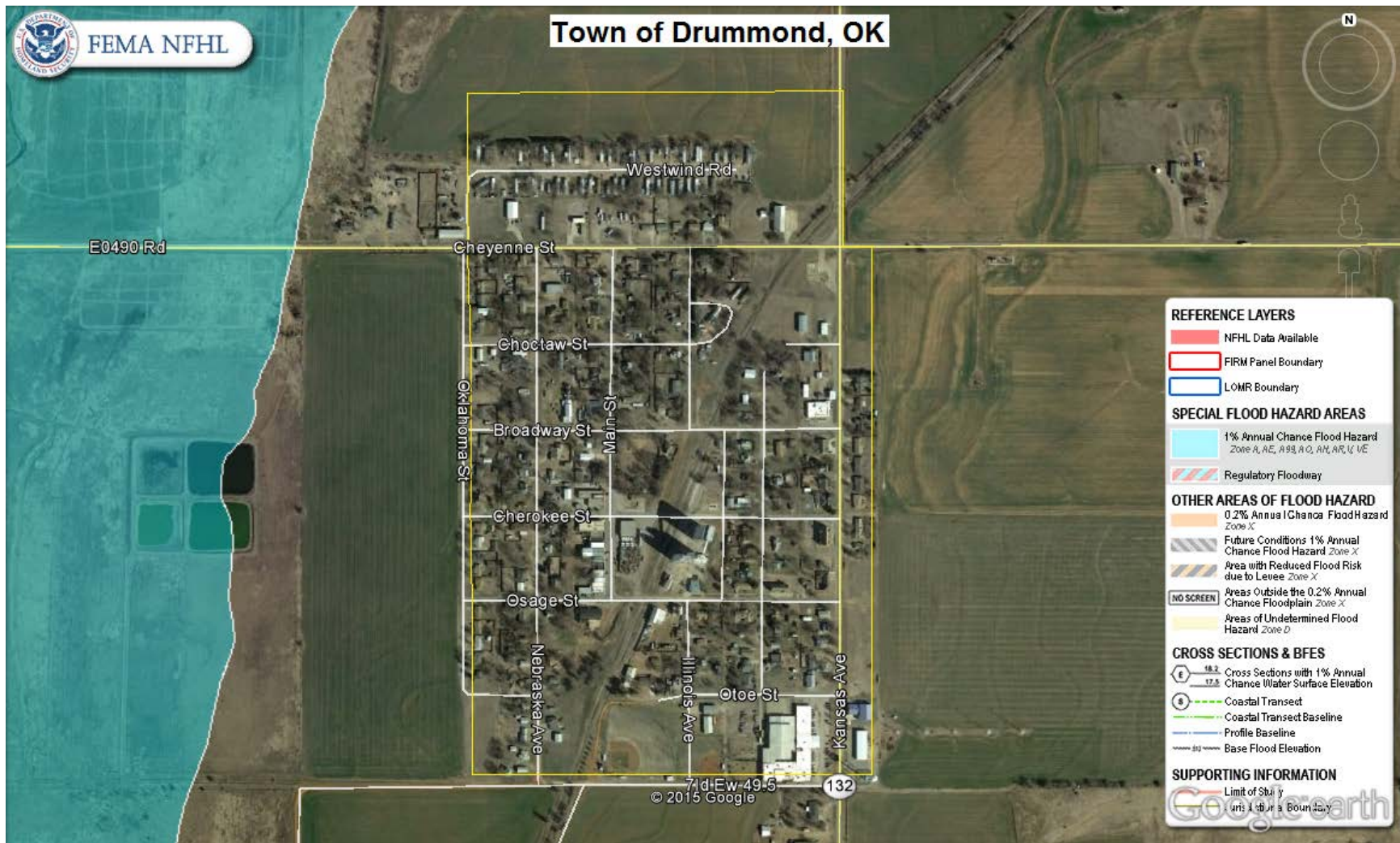




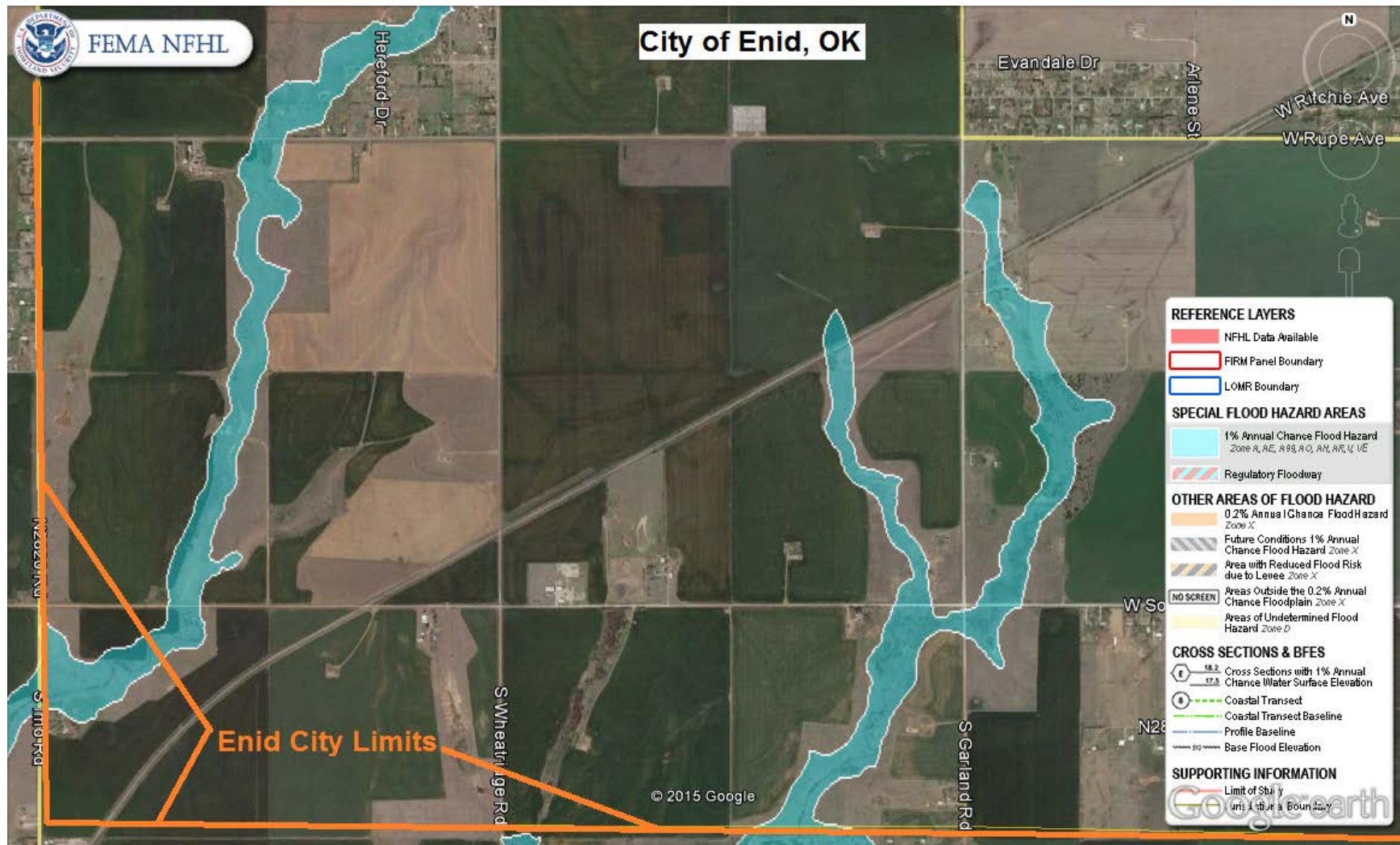




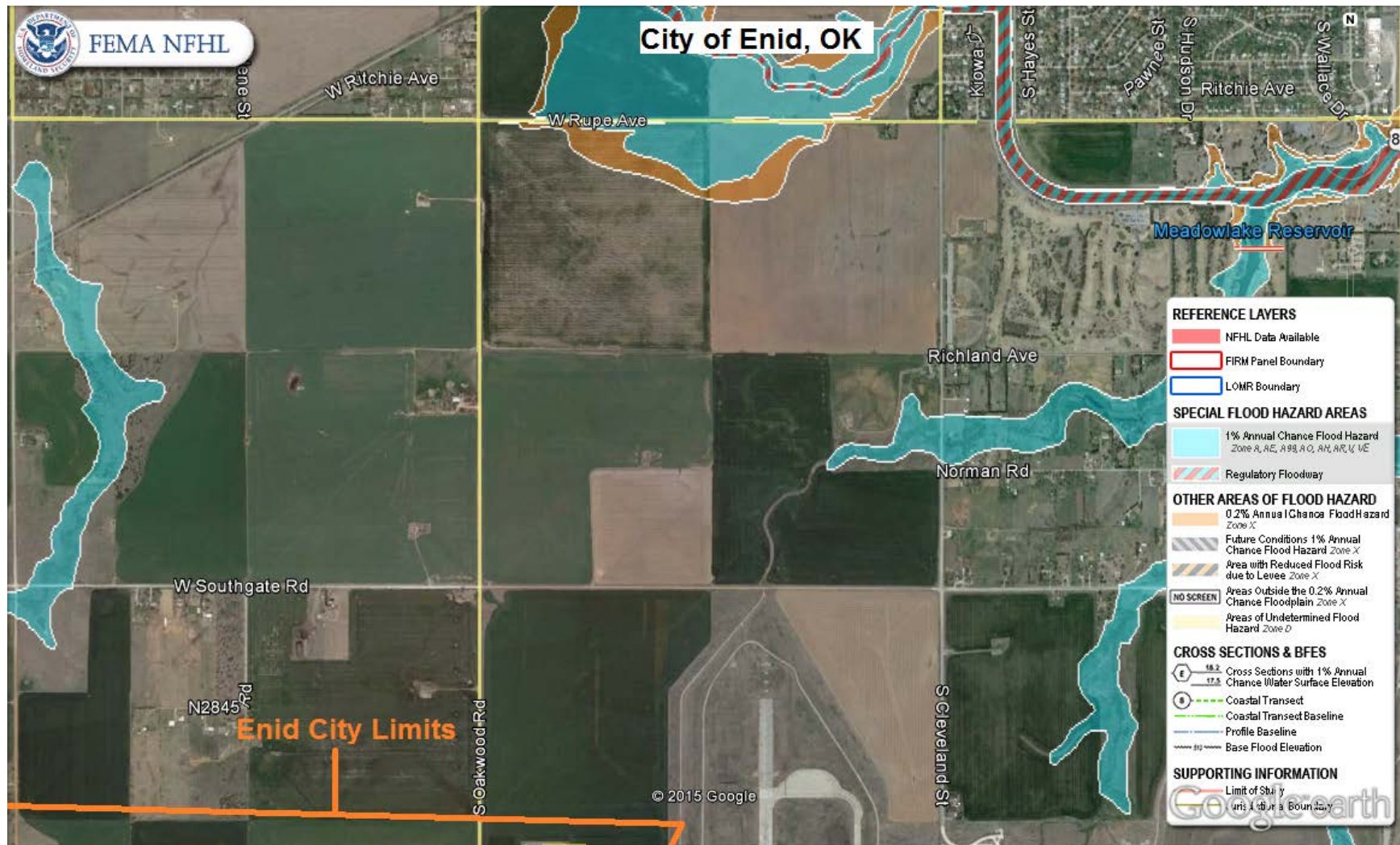


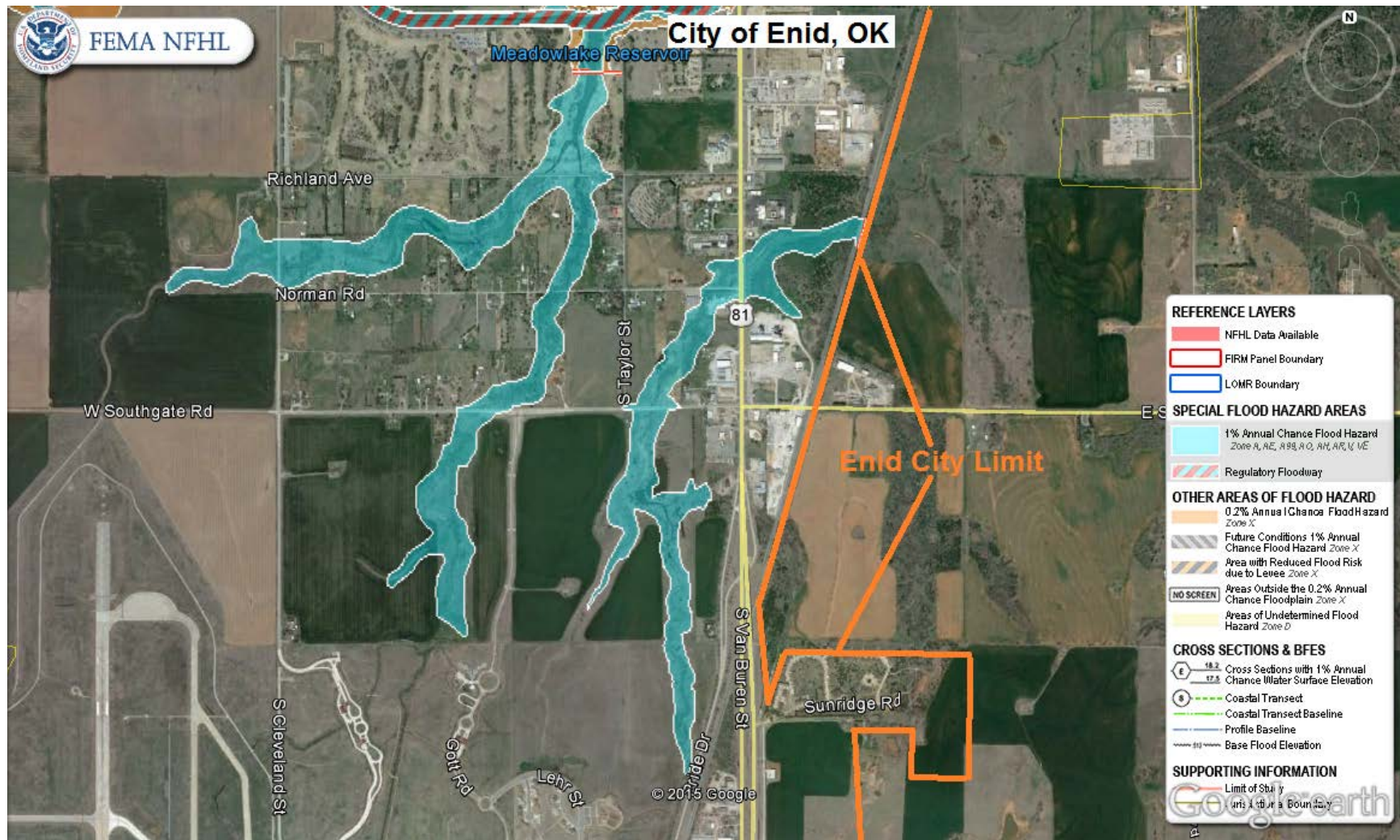




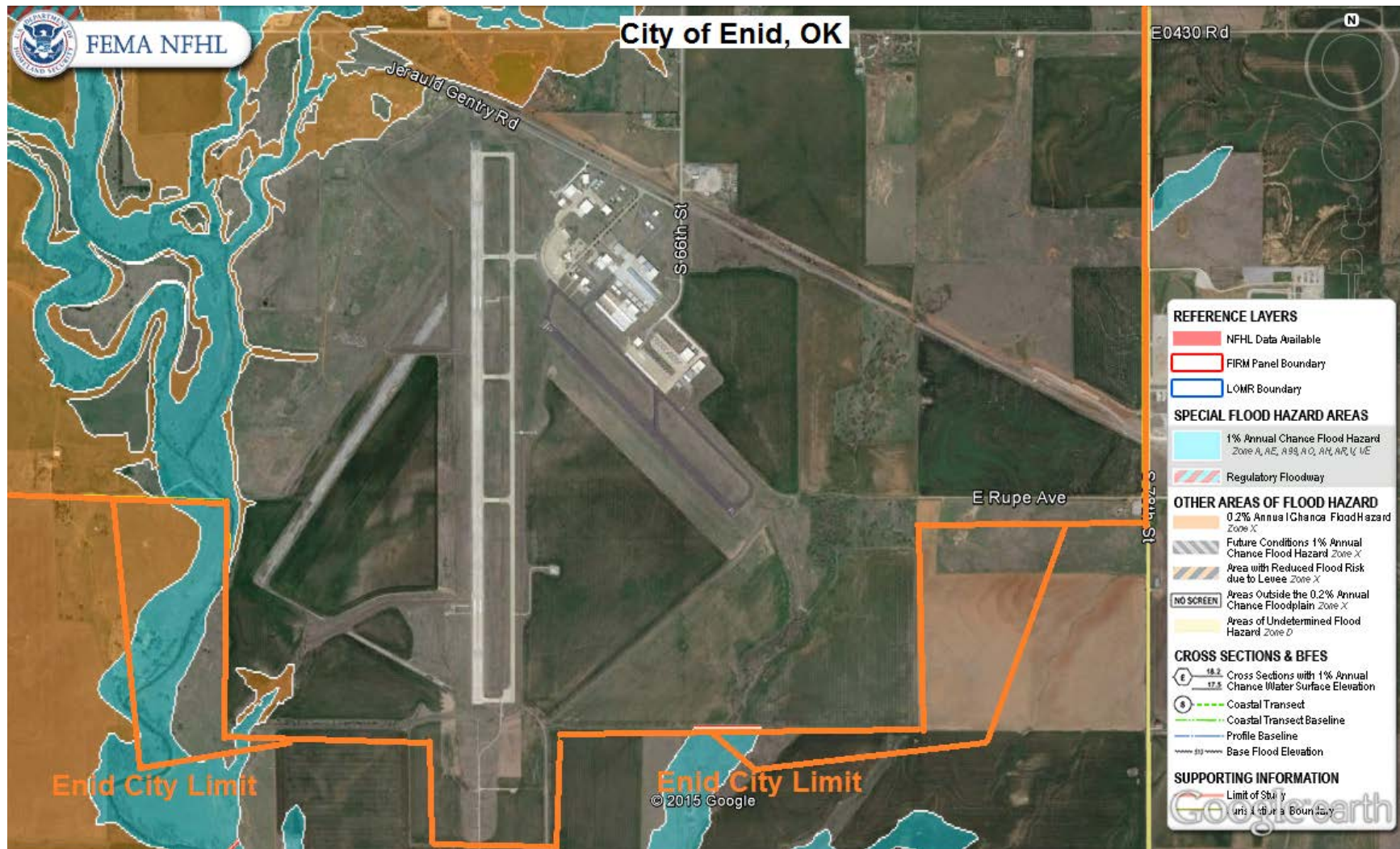




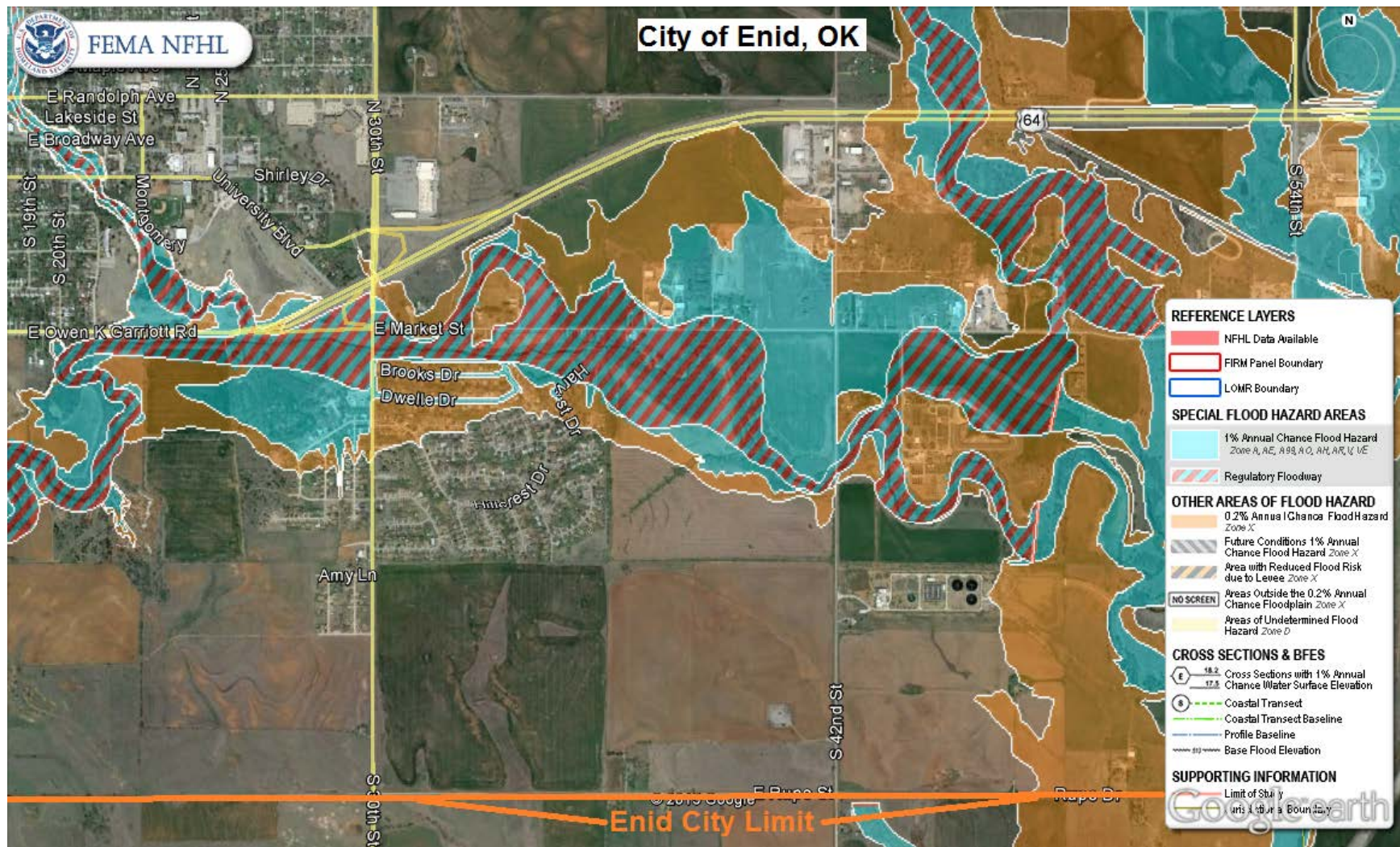




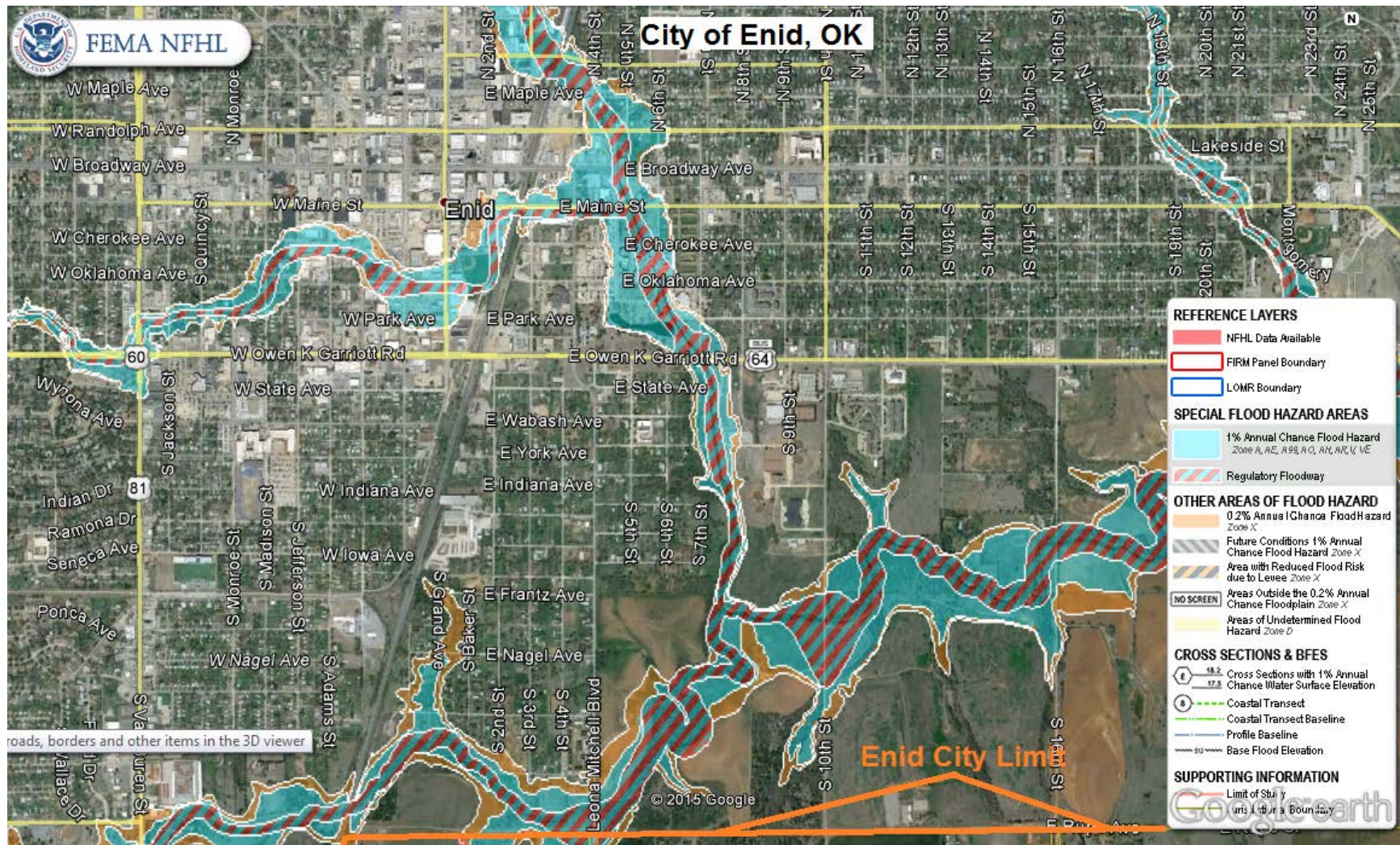




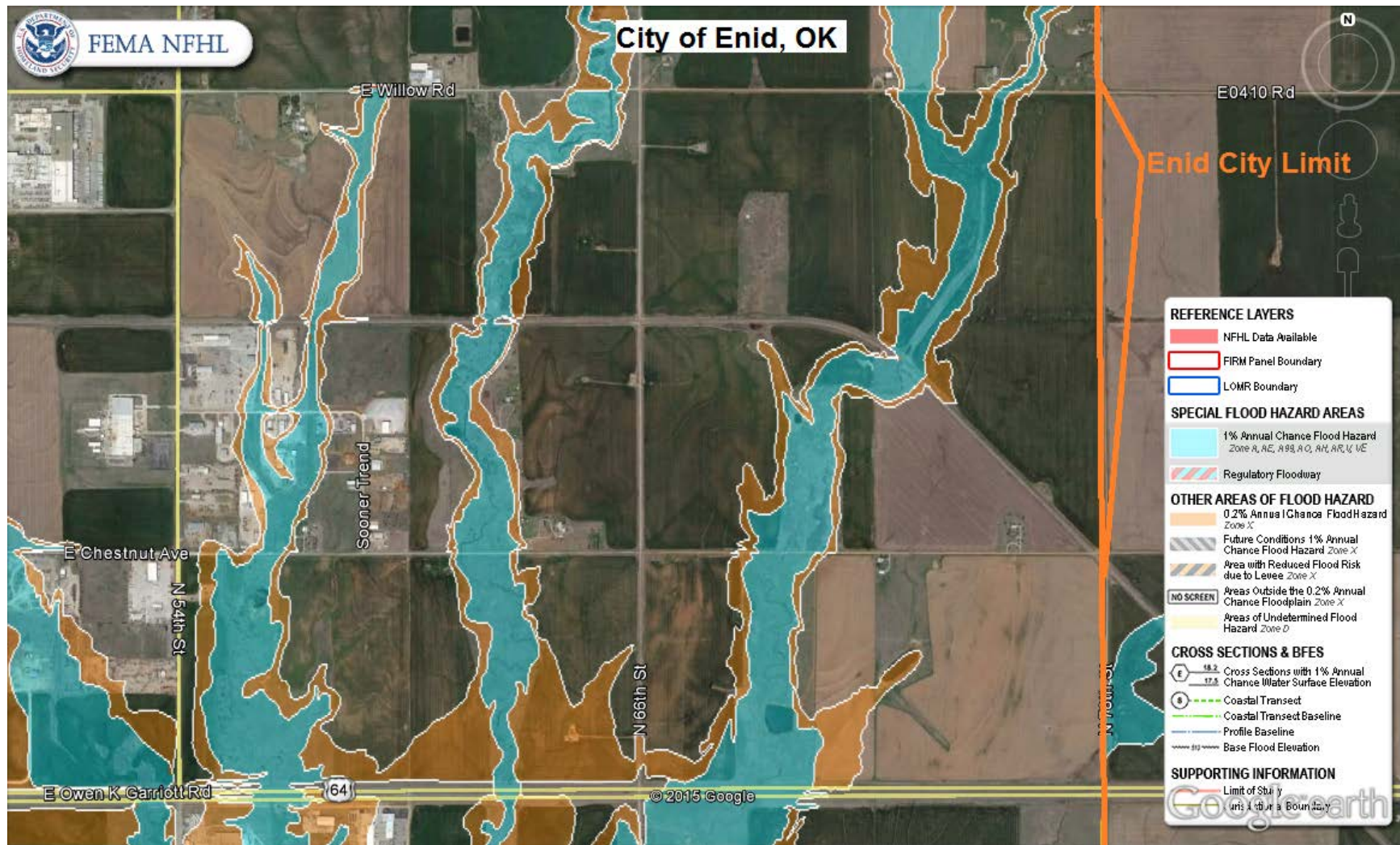








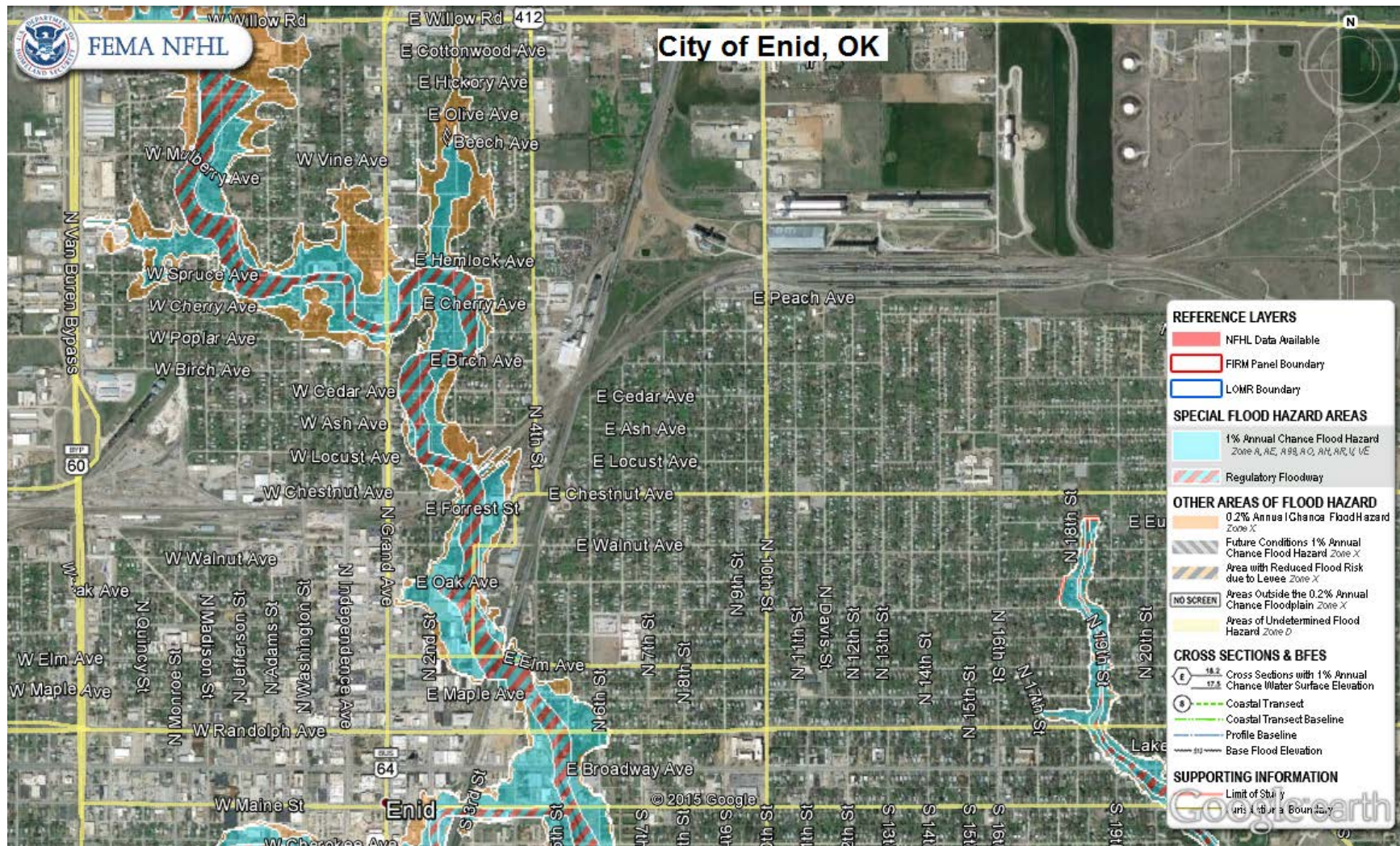




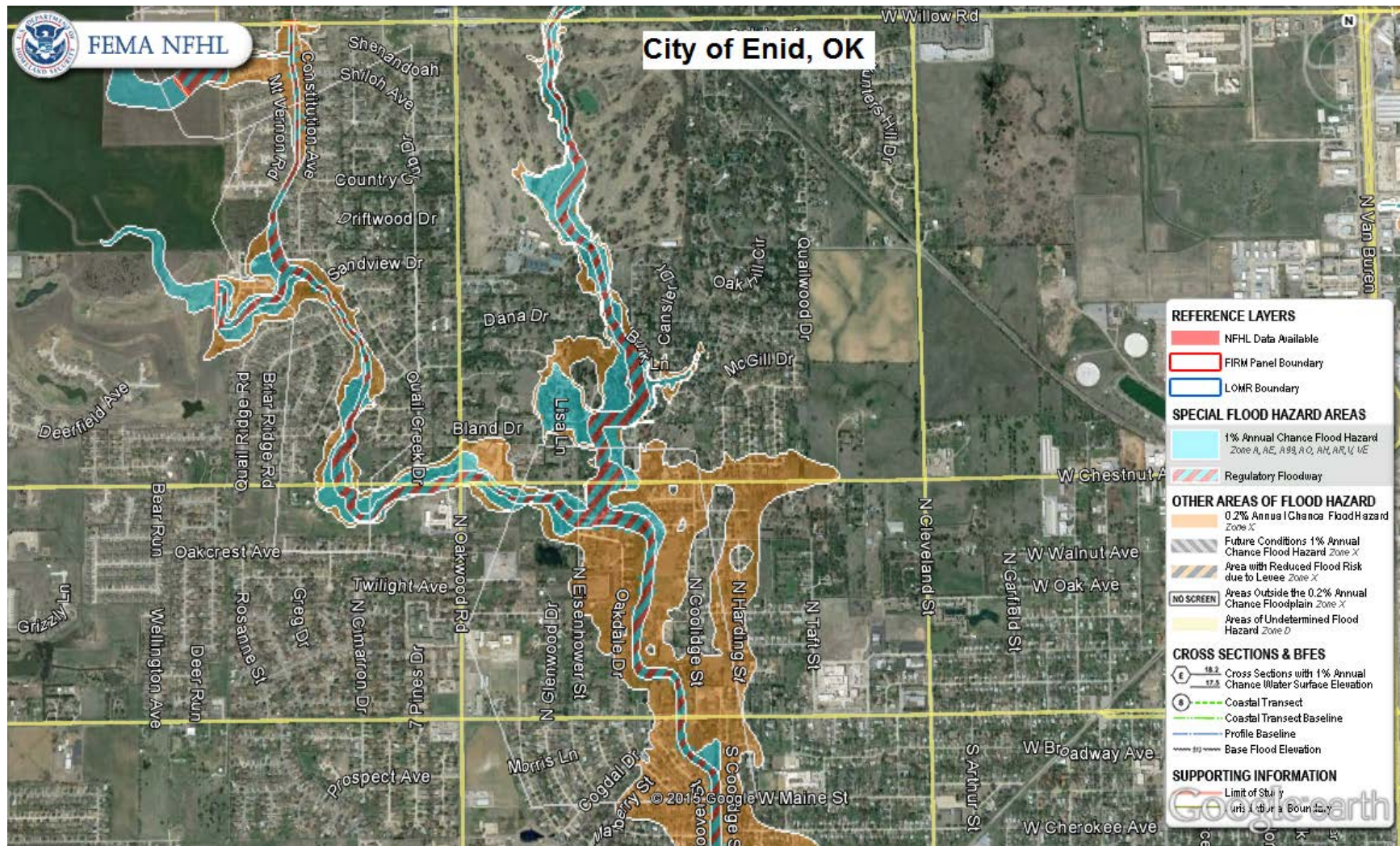




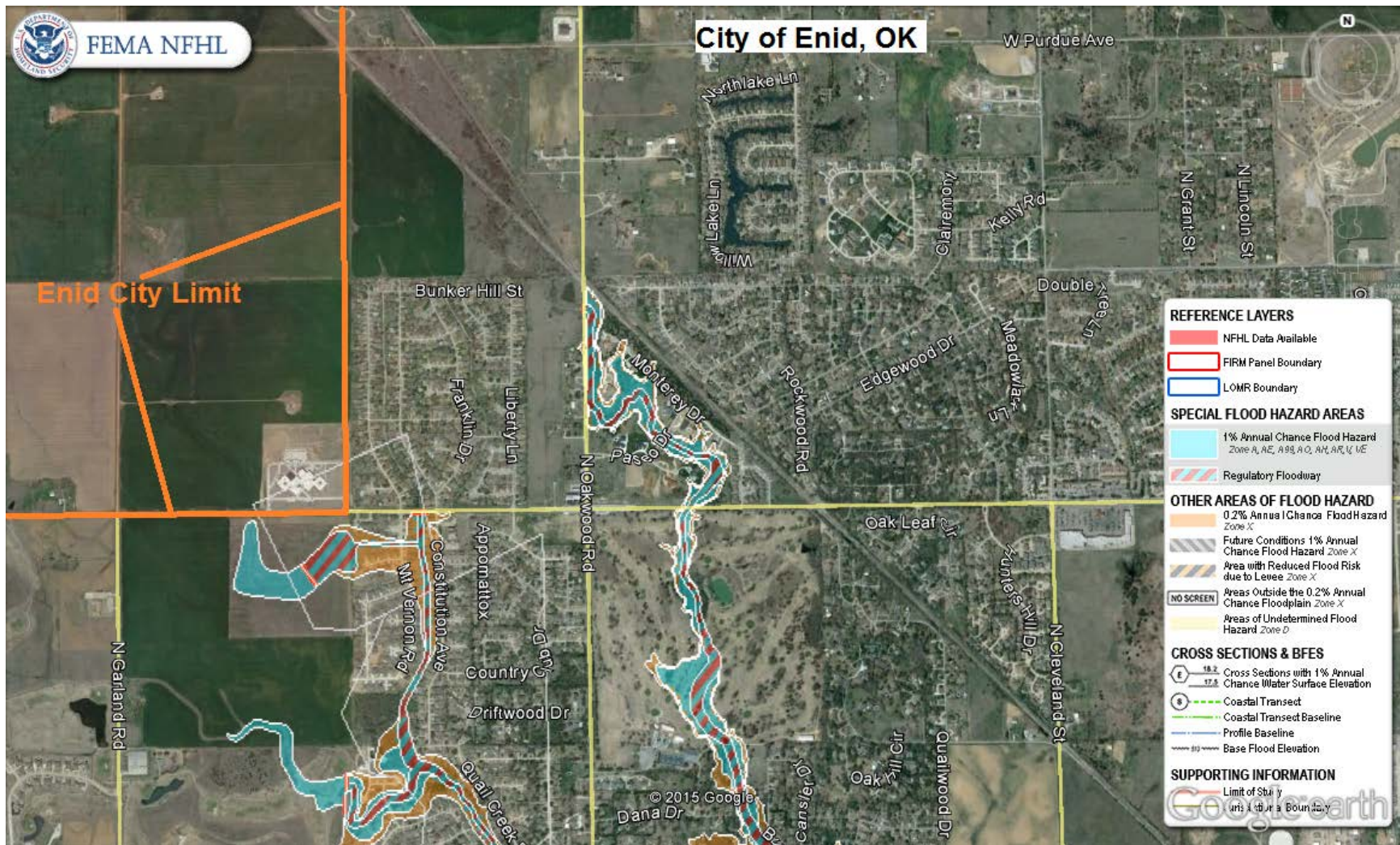




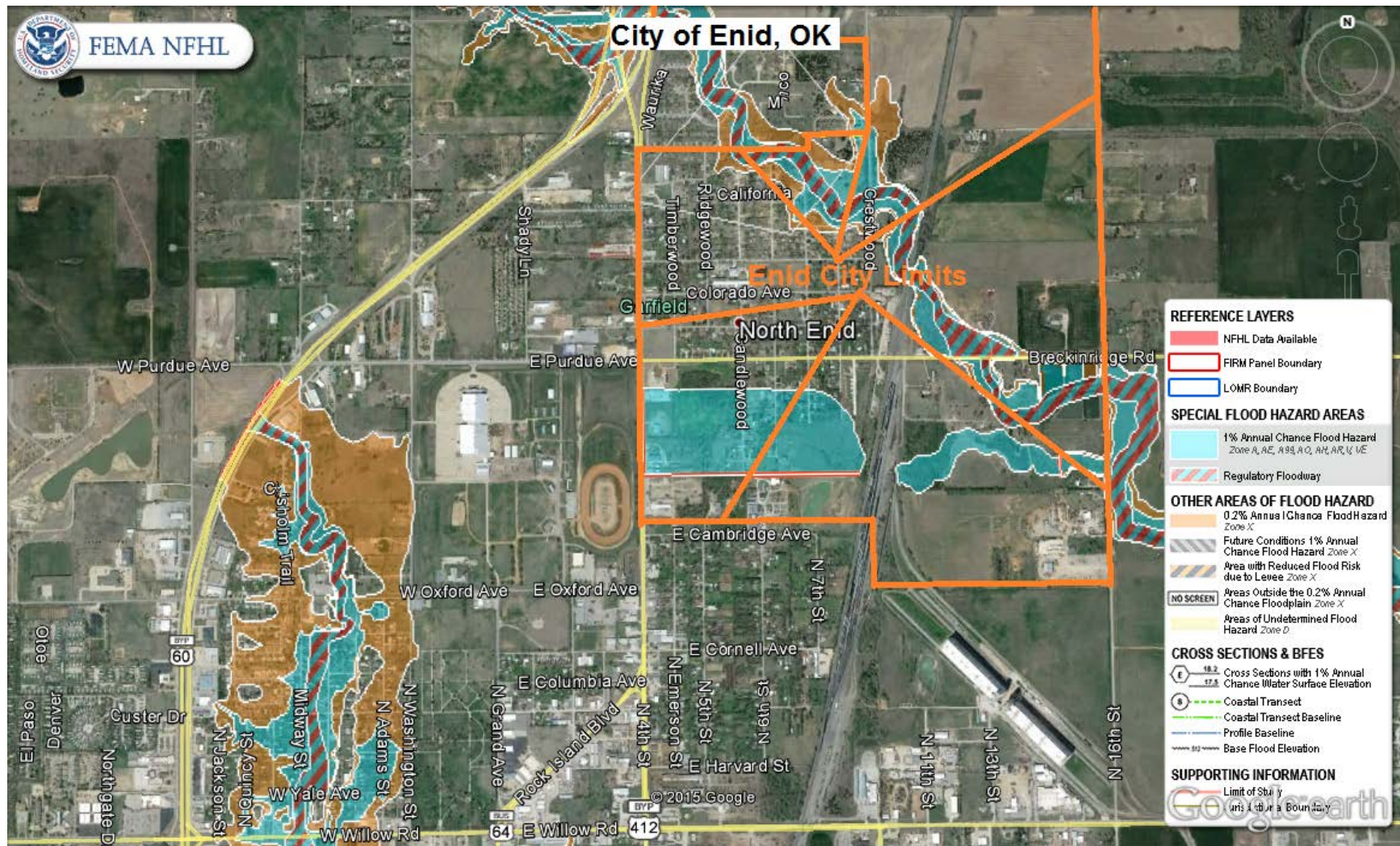




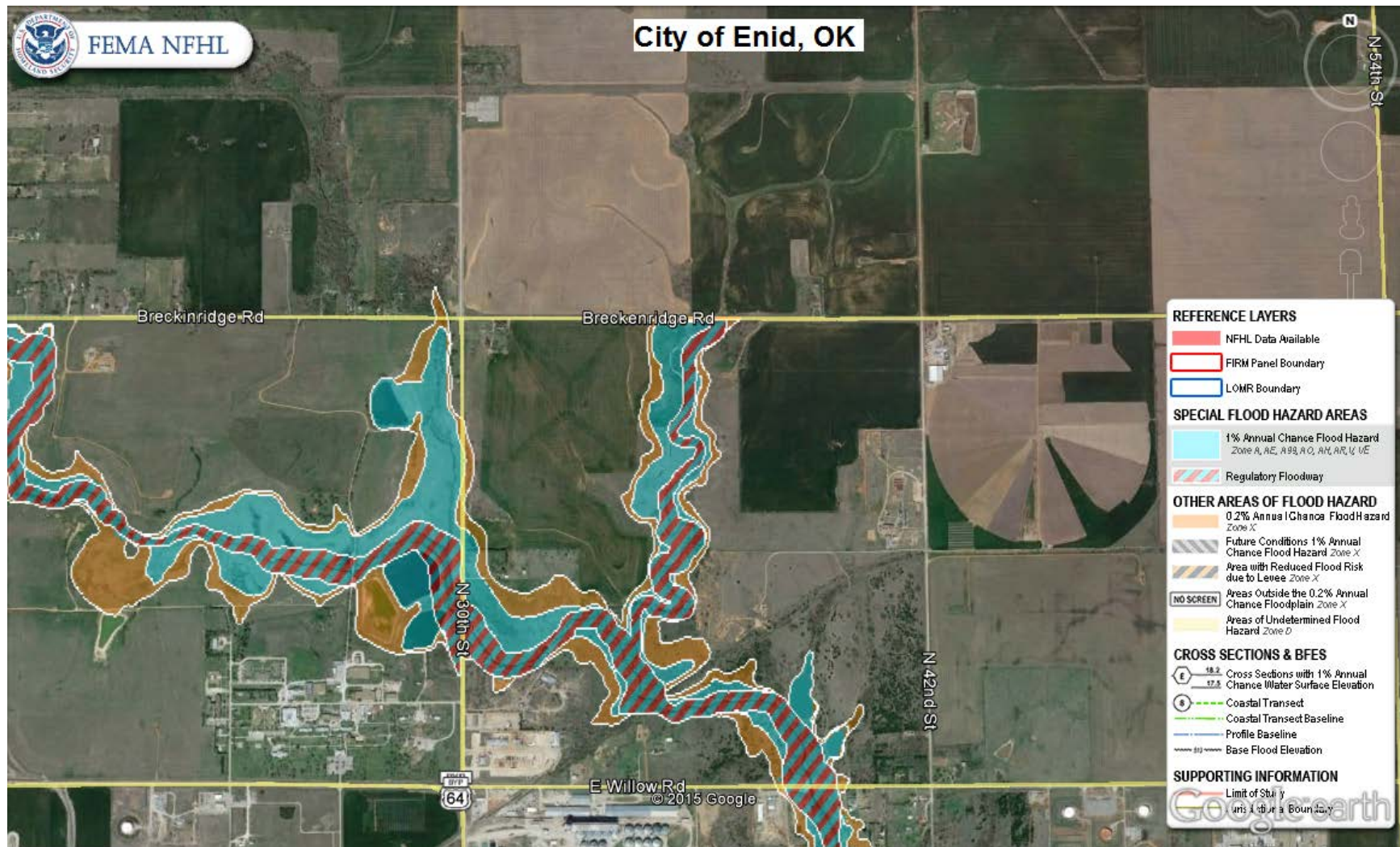






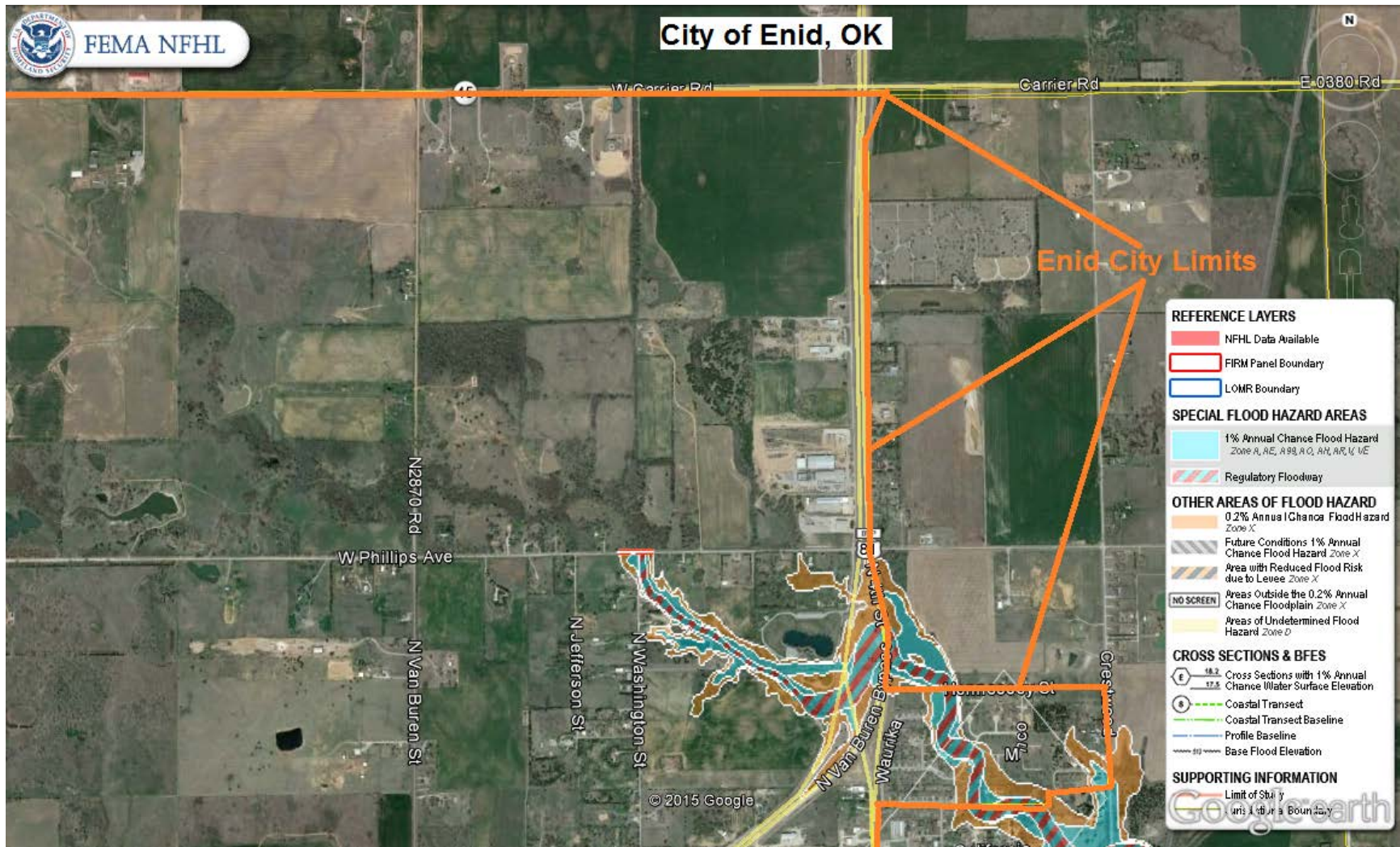








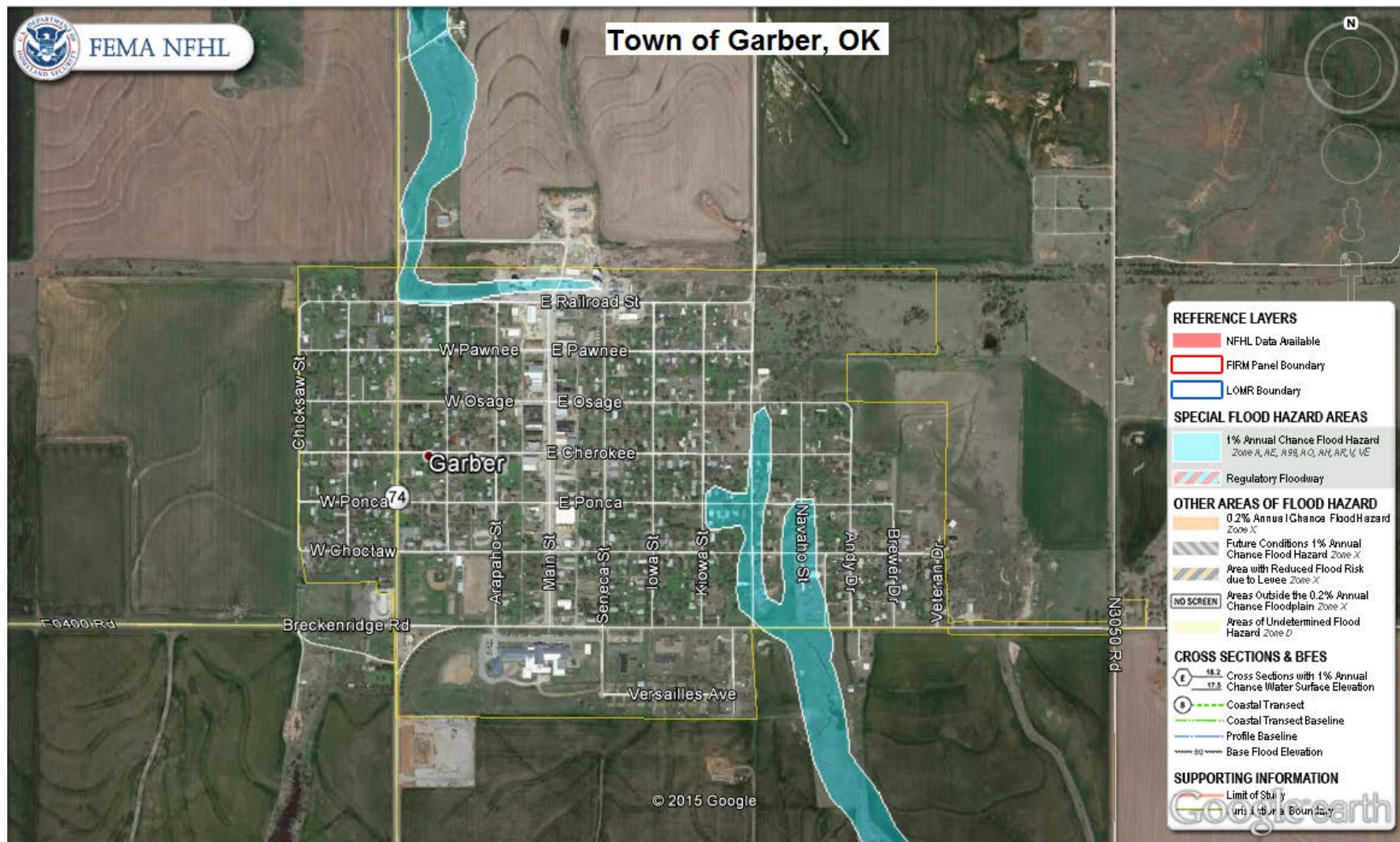






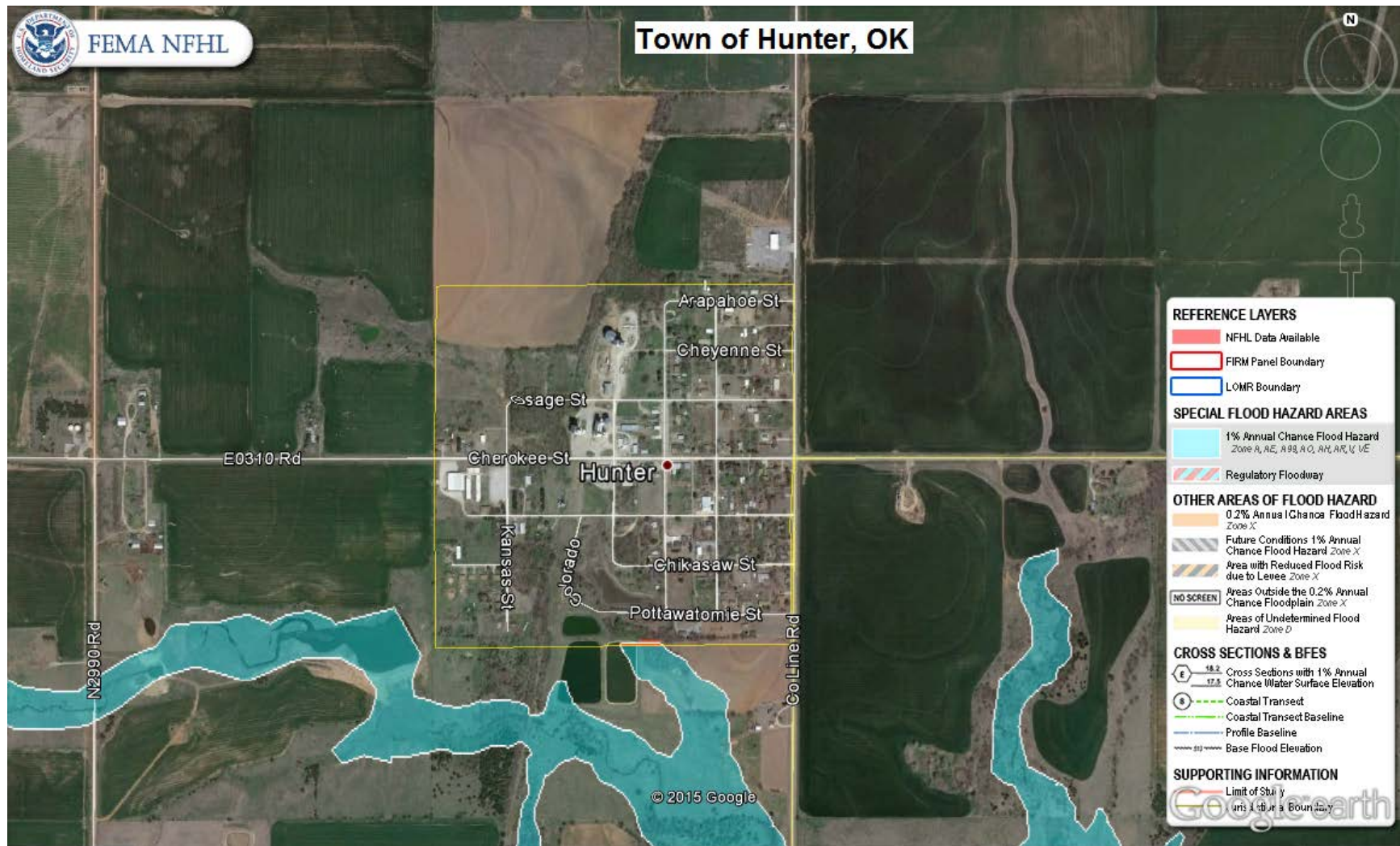




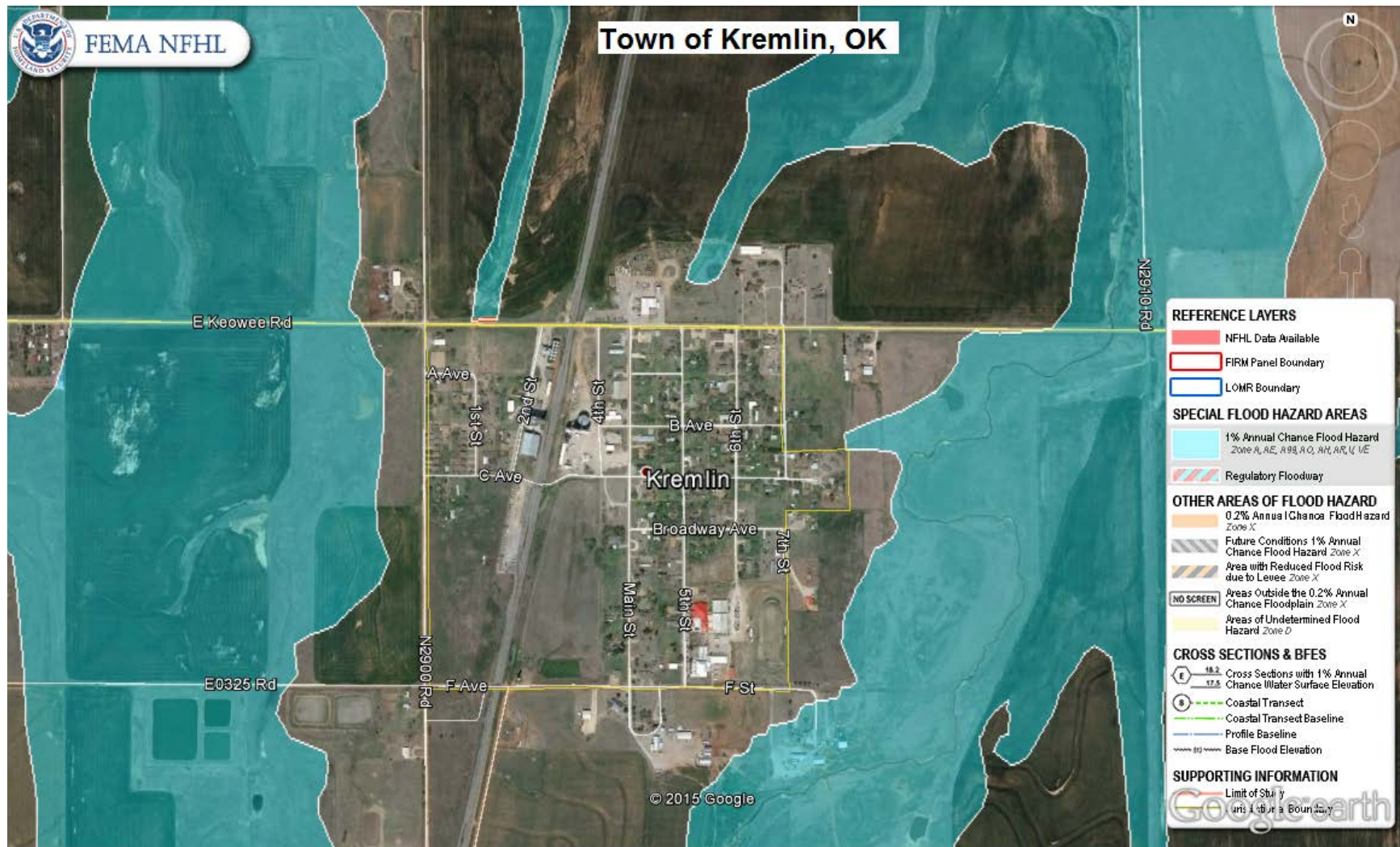


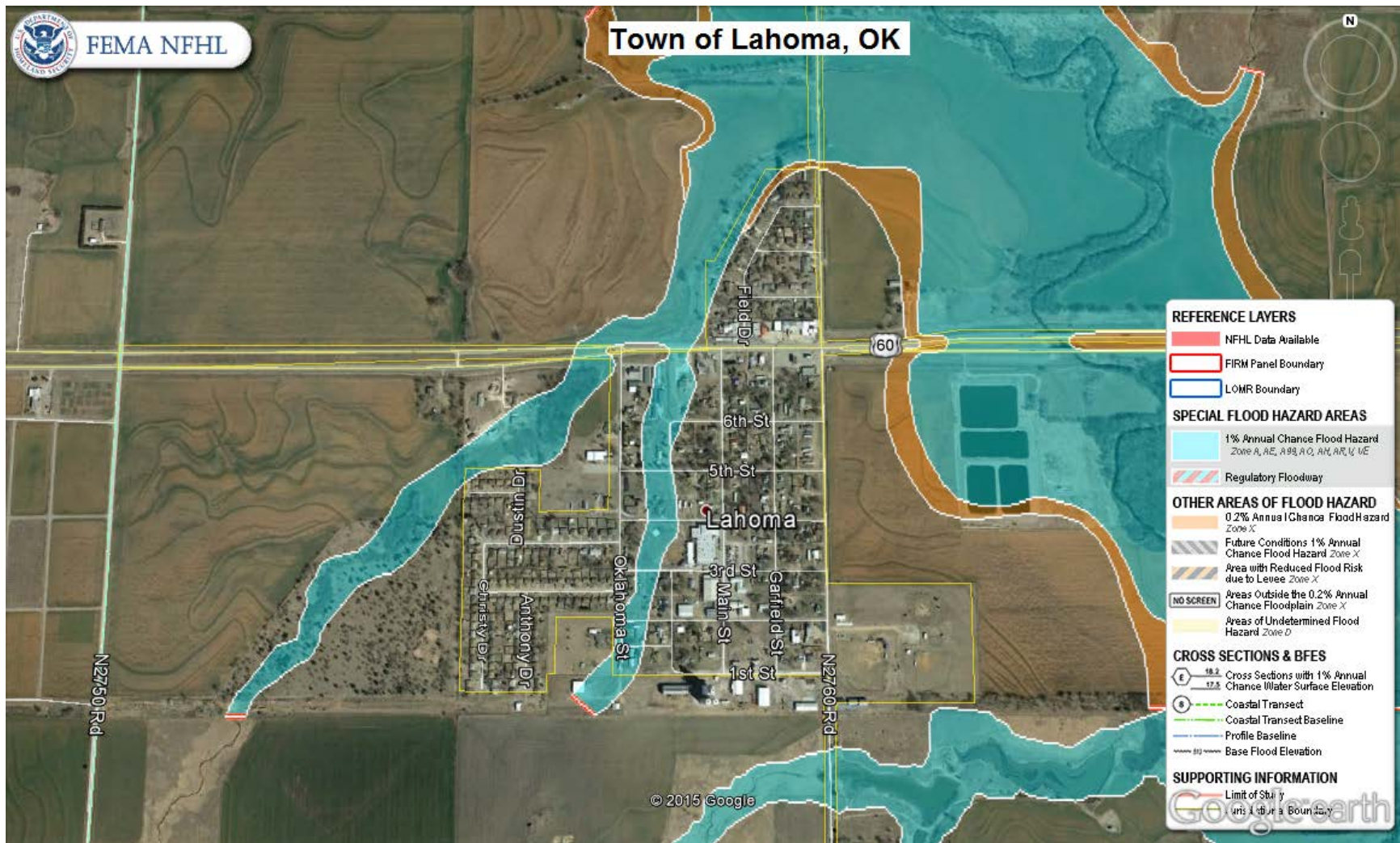




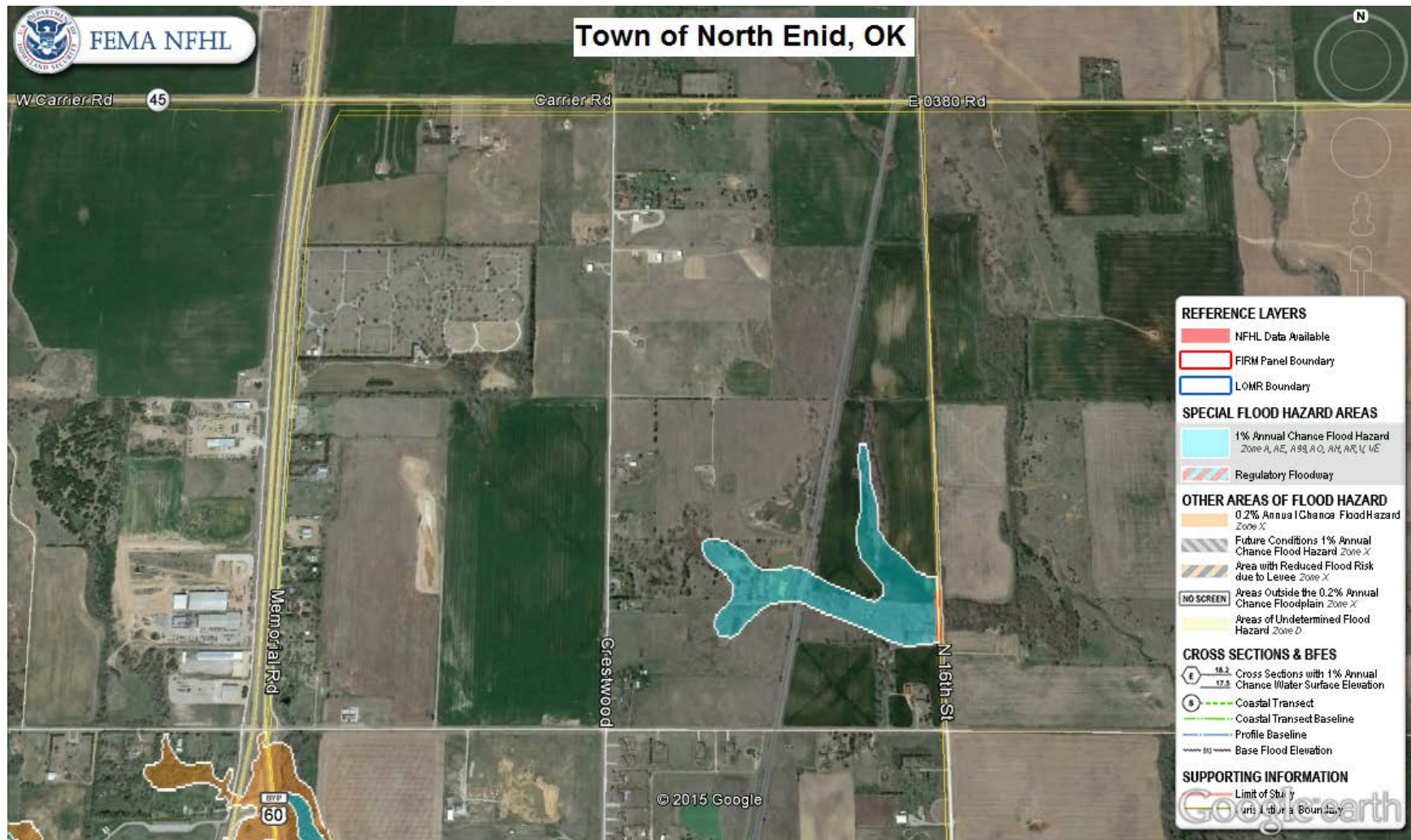




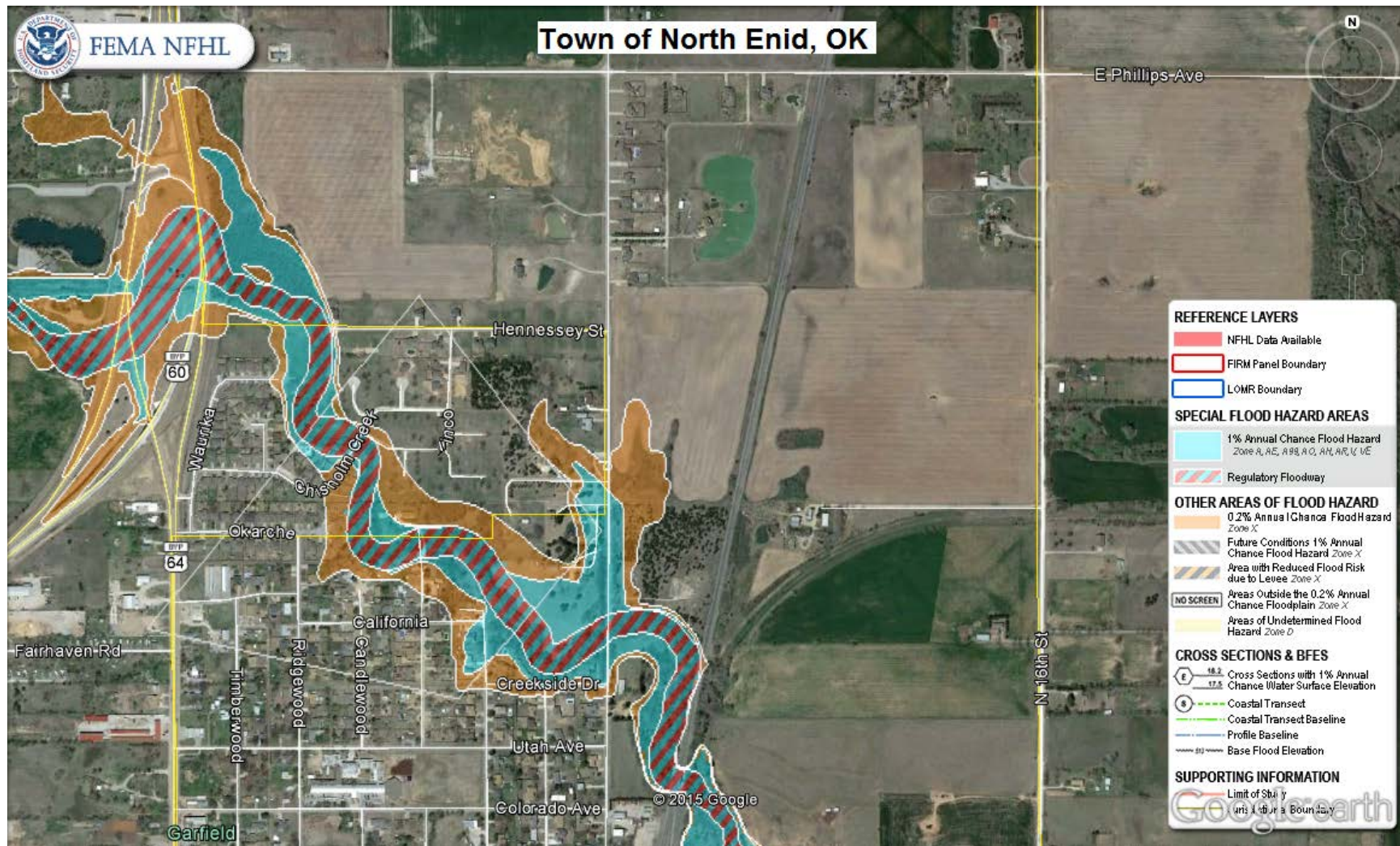




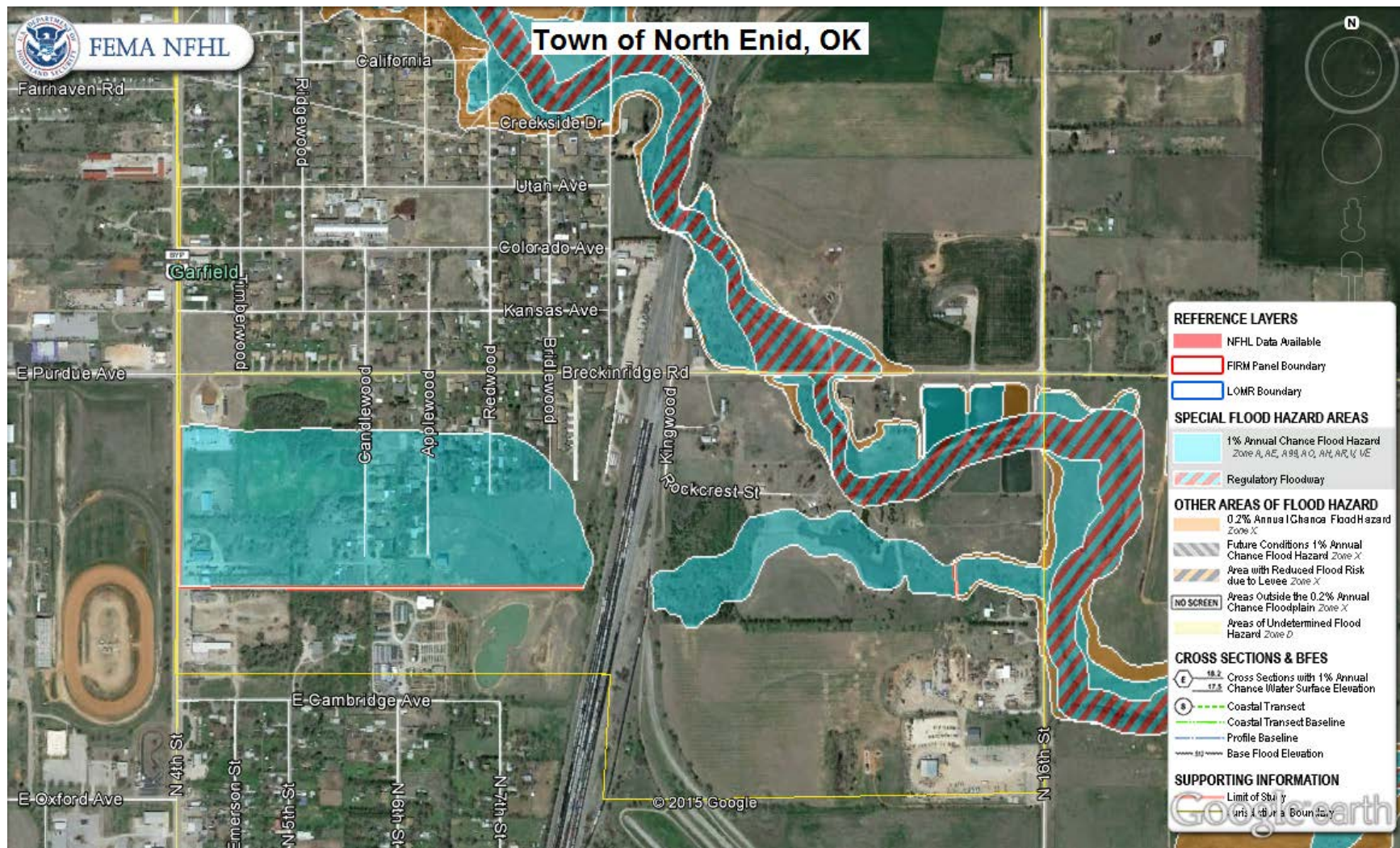








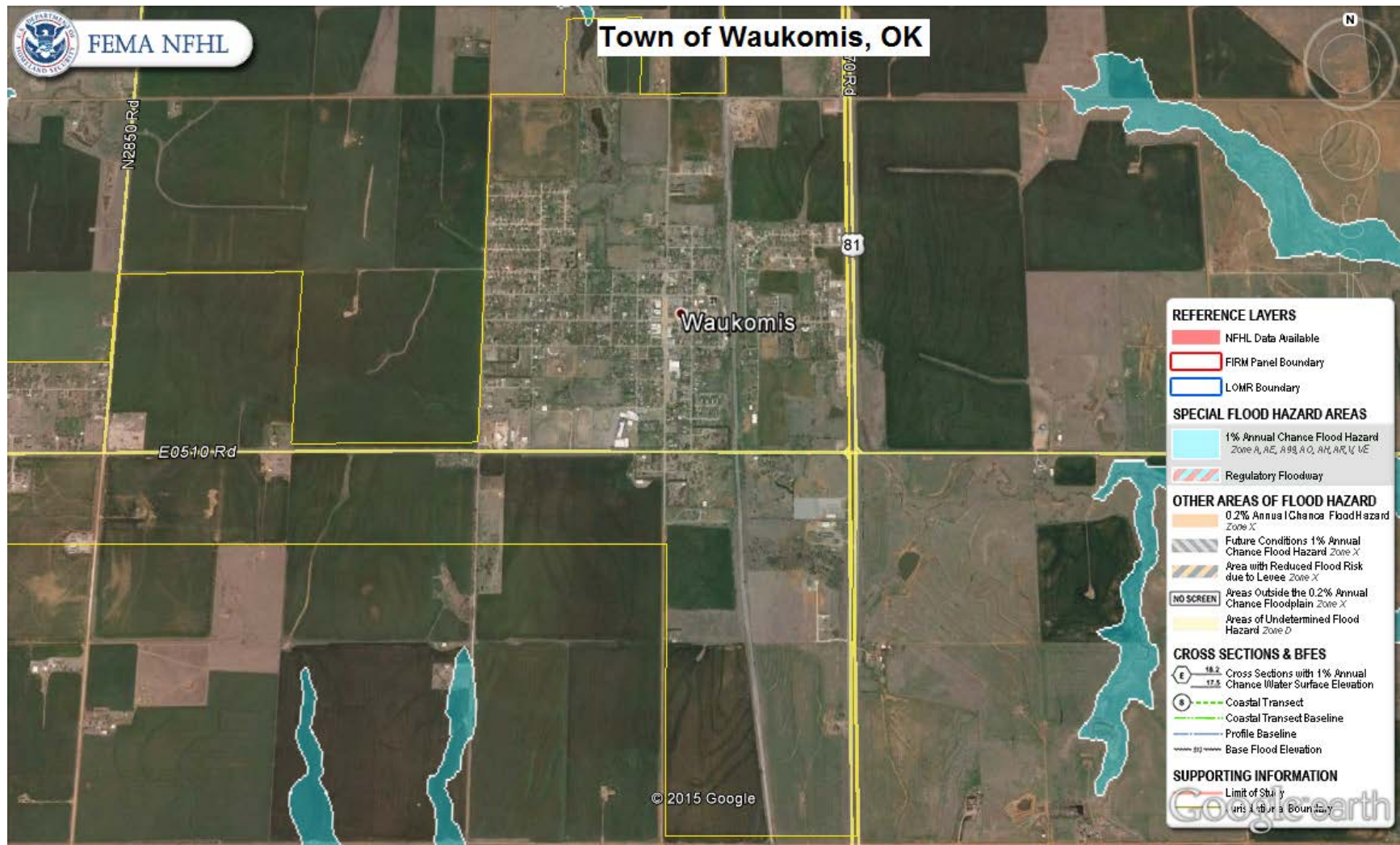


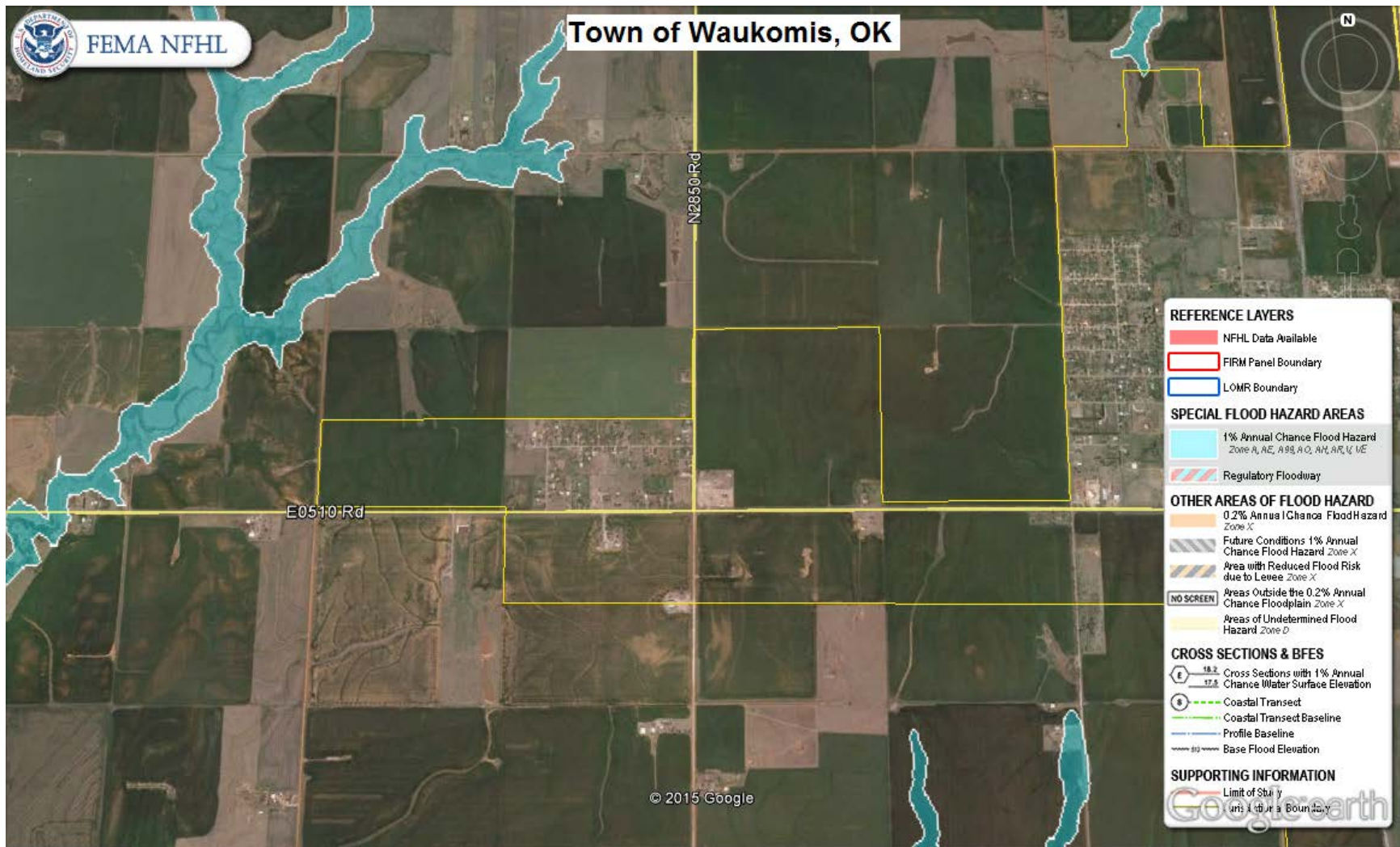














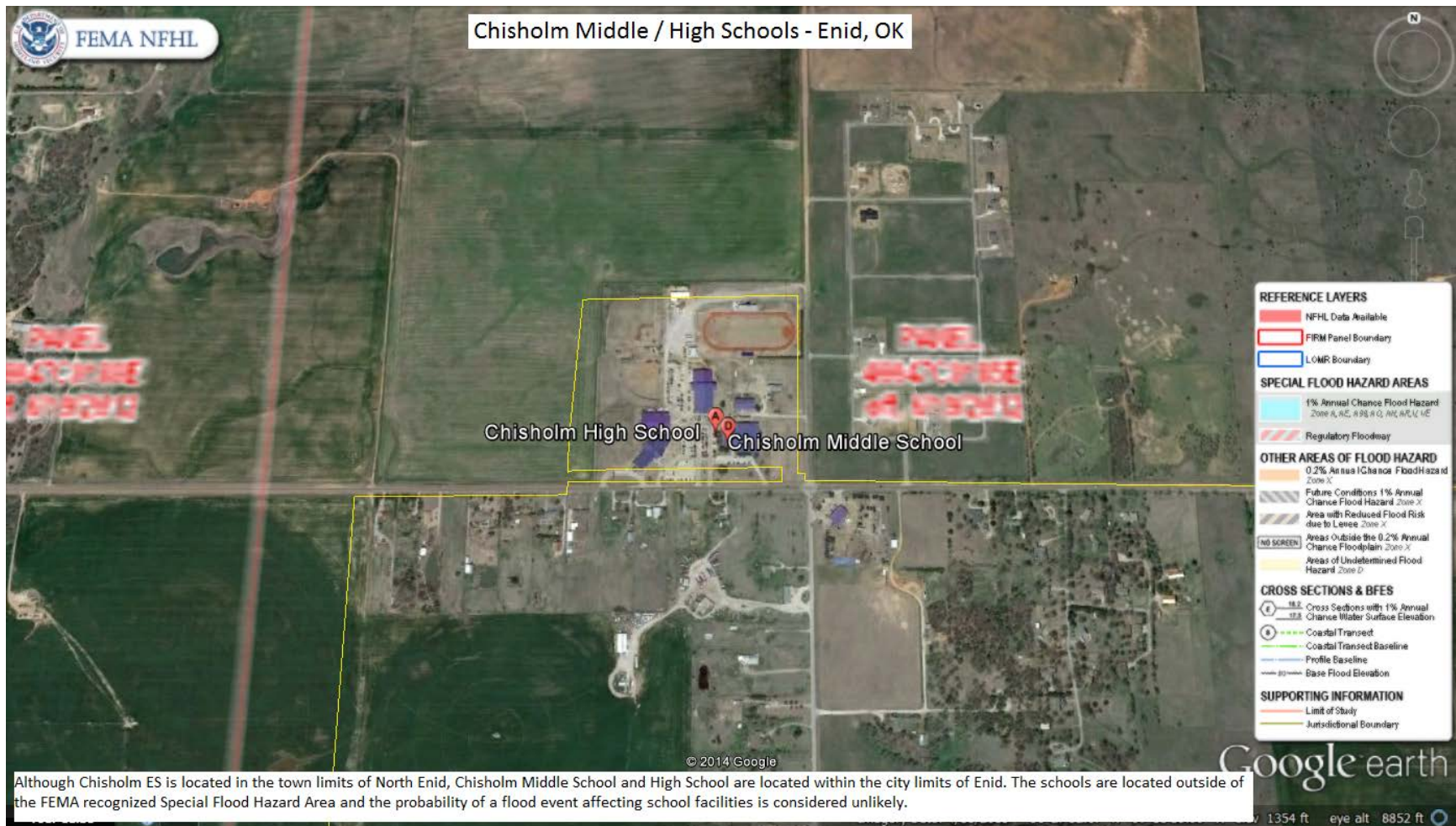








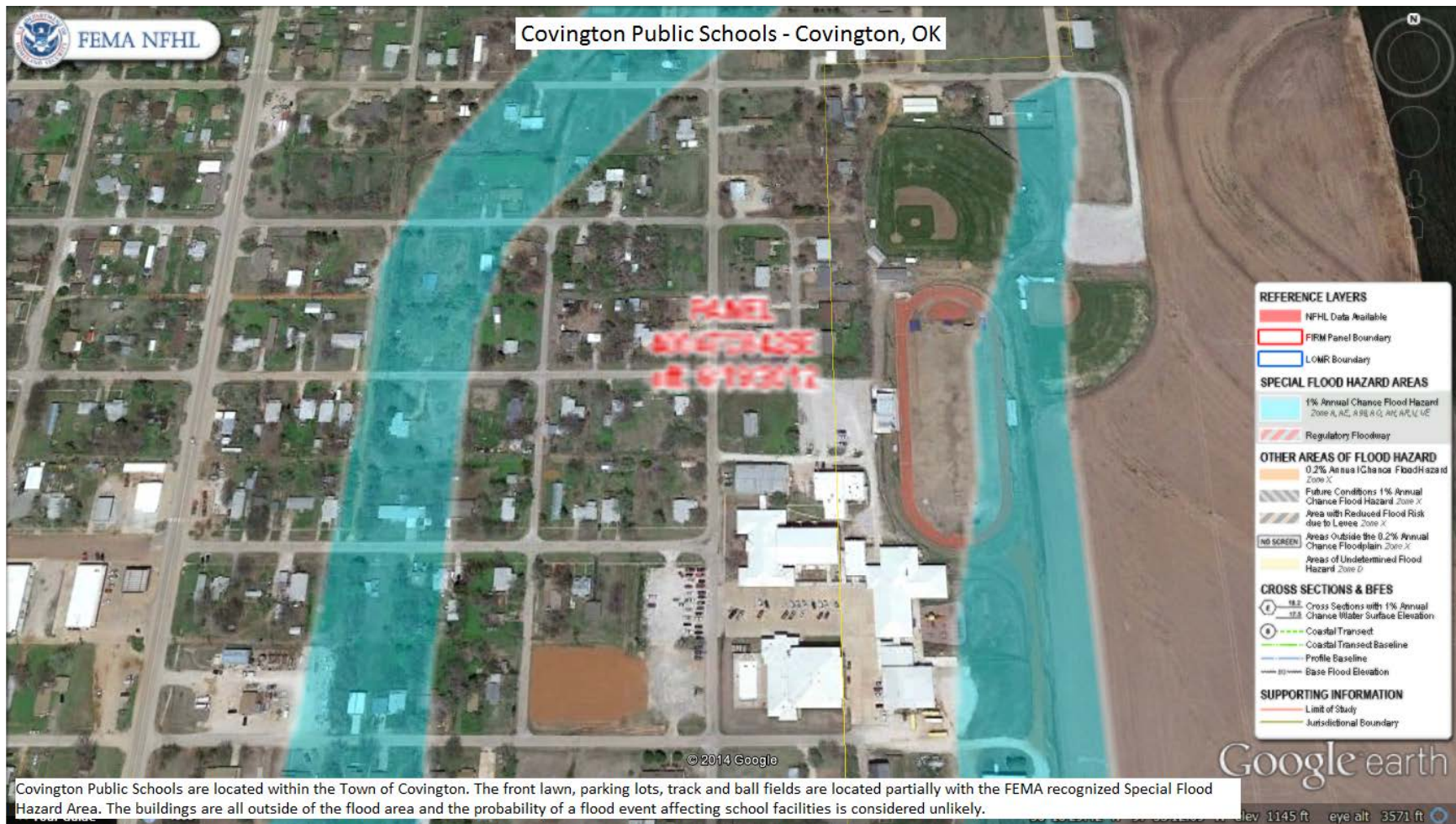


















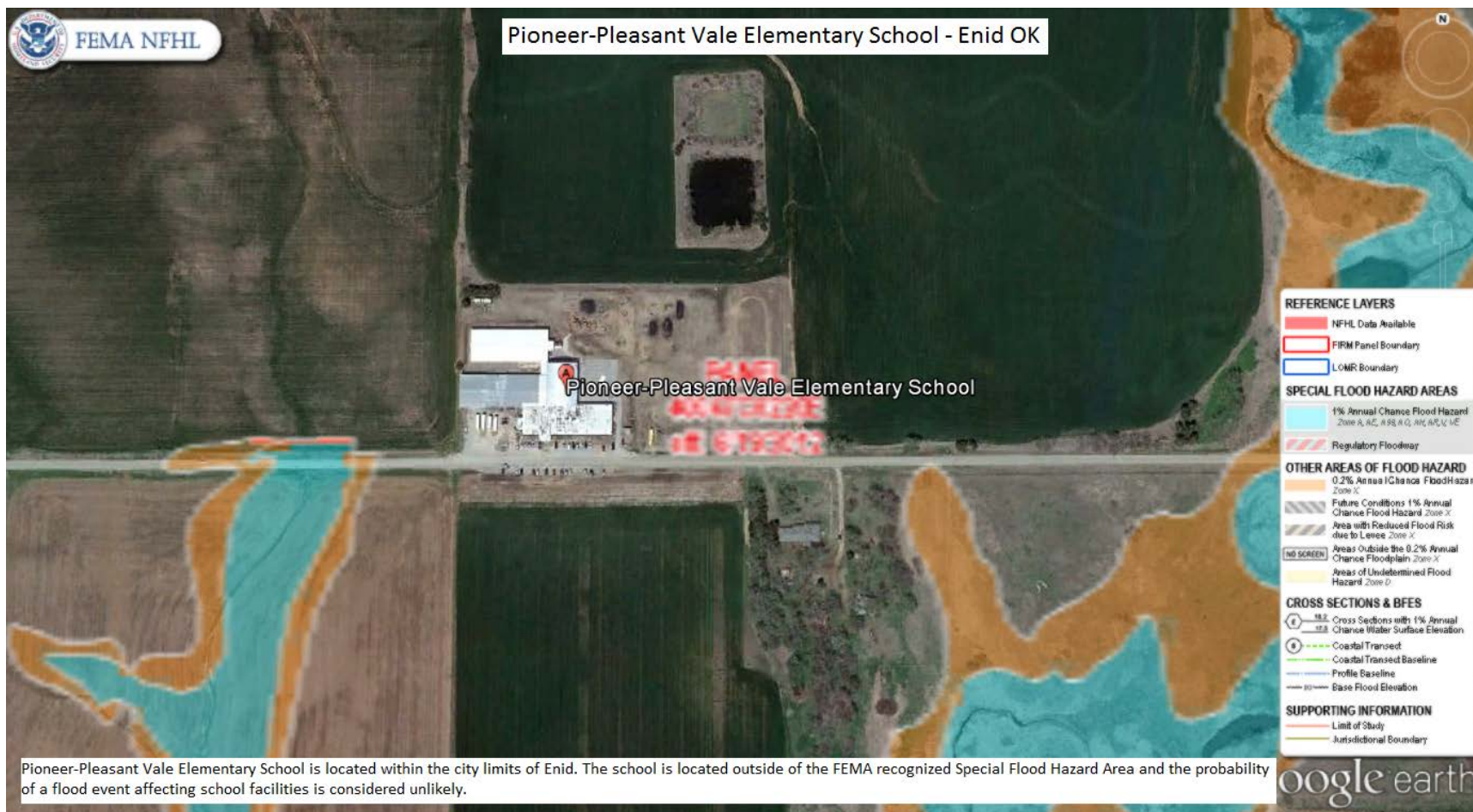


















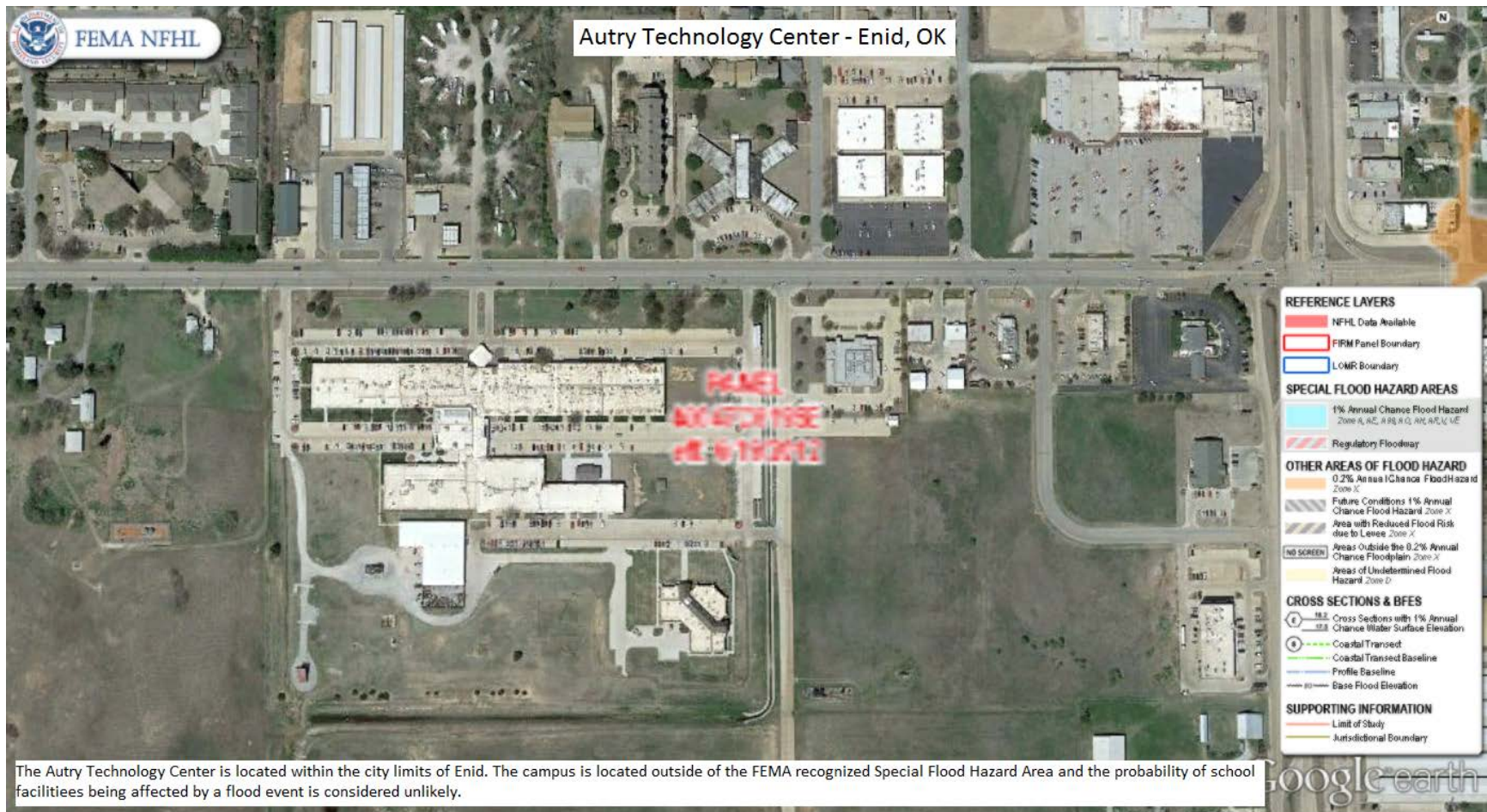














## APPENDIX D: CRITICAL FACILITIES

### IDENTIFICATION OF CRITICAL FACILITIES AND THEIR VULNERABILITIES

#### WHY DO WE DO THIS?

**Instructions in the Federal regulation stipulate:**

***Requirement §201.6(c)(2)(ii) (A):***

**The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas**

***Requirement §201.6(c)(2)(ii) (B):***

**The plan should describe vulnerability in terms of an estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate.**

## SO WHAT IS A “CRITICAL FACILITY” ?

### FEDERAL DEFINITION

- Water & wastewater treatment plants
- Power generating plants
- Hazardous waste sites
- Major infrastructure
- Hospitals
- Emergency shelters
- Fire/police stations
- Government buildings
- Libraries
- Daycare centers
- Retirement homes
- Schools
- Cultural resources
- Historic sites
- Grocery stores
- Fuel stations
- Pharmacies
- Airports

## WE DECIDE WHAT FACILITIES ARE IMPORTANT TO US:

- Emergency response agencies
- Governmental offices and properties
- Health care providers
- Resources (for services and supplies in a crisis)
- What keeps our government going?
- Where do we put the injured?
- What agencies take care of personal needs?
- Short-term vs. long-term needs
- What else?



## THEN CATEGORIZE OUR PRIORITIES:

- Emergency response:
  - Fire / law enforcement / EMS
- Government:
  - Primary seat of government; historical sites
- Health care providers:
  - Hospitals, pharmacies, clinics
- Resources:
  - Wal-Mart, lumber yards, voluntary agencies
- Infrastructure, transport
  - Utilities, roads, bridges

Vulnerability is calculated using the “Potential Damage” estimations and the “Table of Probability vs. Impact.” The chart shown here illustrates the potential vulnerability of structures based upon their location, age and type of construction. Some hazards have little impact on structures (e.g., drought, extreme heat), while other hazards have an enormous impact (e.g., high winds, tornados). For instance, a wood structure over 50 years old, located in a rural setting has a much greater vulnerability to wildfire than if it were located in a metropolitan setting. However, if that were a brick structure in the same setting, the vulnerability would be less significant.

| LOCATION: METROPOLITAN |                  |          |          |          |          |
|------------------------|------------------|----------|----------|----------|----------|
| Type construction      | Less than 10 yrs | < 30 yrs | < 50 yrs | > 50 yrs | > 75 yrs |
| Wood                   | 20%              | 30%      | 50%      | 75%      | 90%      |
| Metal                  | 15%              | 25%      | 40%      | 65%      | 90%      |
| Masonry /concrete      | 10%              | 20%      | 35%      | 60%      | 70%      |
| Brick                  | 10%              | 20%      | 35%      | 50%      | 60%      |

| LOCATION: URBAN   |                  |          |          |          |          |
|-------------------|------------------|----------|----------|----------|----------|
| Type construction | Less than 10 yrs | < 30 yrs | < 50 yrs | > 50 yrs | > 75 yrs |
| Wood              | 20%              | 30%      | 50%      | 75%      | 90%      |
| Metal             | 15%              | 25%      | 40%      | 65%      | 90%      |
| Masonry /concrete | 10%              | 20%      | 35%      | 60%      | 70%      |
| Brick             | 10%              | 20%      | 35%      | 50%      | 60%      |

| LOCATION: RURAL   |                  |          |          |          |          |
|-------------------|------------------|----------|----------|----------|----------|
| Type construction | Less than 10 yrs | < 30 yrs | < 50 yrs | > 50 yrs | > 75 yrs |
| Wood              | 20%              | 30%      | 50%      | 75%      | 90%      |
| Metal             | 15%              | 25%      | 40%      | 65%      | 90%      |
| Masonry /concrete | 10%              | 20%      | 35%      | 60%      | 70%      |
| Brick             | 10%              | 20%      | 35%      | 50%      | 60%      |



Using the determinations of the probability of each identified hazard, the impact of the loss of that facility is then calculated. The combination of the two factors produces the likely impact of a specific hazard upon that same structure. Although the probability of a hazard affecting a specific structure may be high, but the impact of damage or loss is low, then the overall impact is ranked in a lower category. The Table of Probability vs. Impact is also shown here.

Estimated values of structures, contents, infrastructure and other identified resources are provided through local assessors and insurers.

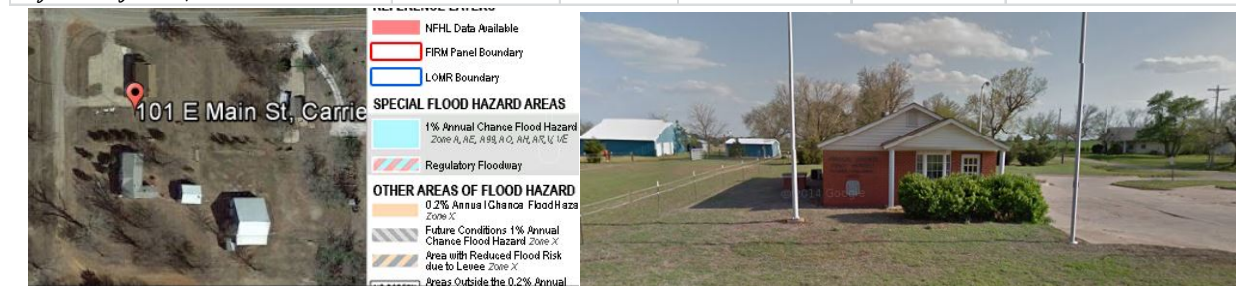
| PROBABILITY OF AN EVENT    | PROBABILITY vs. IMPACT |  |          |  |        |  |         |  |
|----------------------------|------------------------|--|----------|--|--------|--|---------|--|
|                            |                        |  |          |  |        |  |         |  |
| Highly Likely<br>70-100%   |                        |  |          |  |        |  |         |  |
|                            |                        |  |          |  |        |  |         |  |
| Likely<br>50-70%           |                        |  |          |  |        |  |         |  |
|                            |                        |  |          |  |        |  |         |  |
| Possible<br>30-50%         |                        |  |          |  |        |  |         |  |
|                            |                        |  |          |  |        |  |         |  |
| Unlikely<br>10-30%         |                        |  |          |  |        |  |         |  |
|                            |                        |  |          |  |        |  |         |  |
| POTENTIAL DEGREE OF IMPACT | Minimum                |  | Moderate |  | Major  |  | Total   |  |
|                            | 10-30%                 |  | 30-50%   |  | 50-70% |  | 70-100% |  |

## Appendix D – Critical Facilities

| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Carrier Fire Station |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 130 W. Main street                  |                                         | COUNTY:                             | Garfield County                   |
|                                                                                  | Latitude:                 | 36.475996                           | Longitude:                              | - 98.021638                         |                                   |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                     |                                   |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input type="checkbox"/> Other      |                                         |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                     |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                        | Vulnerability quotient            |
| Rural                                                                            | 1969                      | 1                                   | Metal                                   | 1,200.00                            | 40%                               |
| SFHA NO                                                                          | Building value:           | \$78,000                            |                                         | Contents value:                     | \$156,000                         |
|                                                                                  |                           |                                     |                                         |                                     |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                   |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 128,700                             |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 93,600                              |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 187,200                             |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                   |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 99,450                              |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 111,150                             |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 76,050                              |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 187,200                             |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                   |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 134,550                             |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                                         |                                     |                                   |

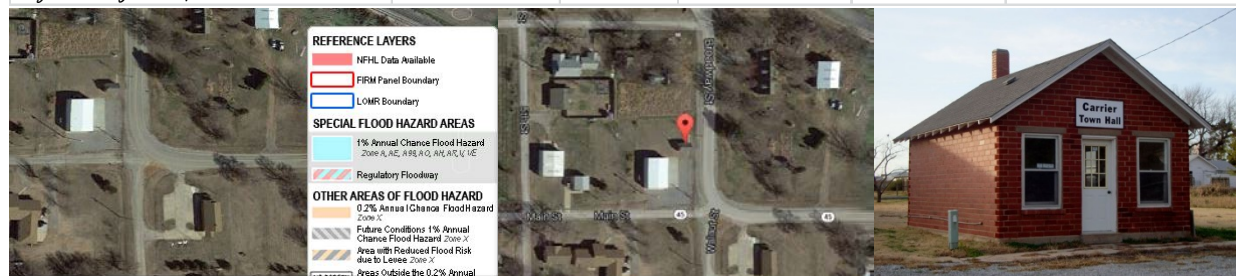


| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Carrier Post Office |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 101 East Main Street                           |                                         | COUNTY:                            | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.475528                                      | Longitude:                              | - 98.020924                        |                                   |
| WHY CRITICAL:                                                                    |                                            |                                                |                                         |                                    |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility   | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                                |                                         |                                    |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                    |                                   |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                       | Vulnerability quotient            |
| Rural                                                                            | 1970                                       | 1                                              | Brick                                   | 710.00                             | 35%                               |
| SFHA NO                                                                          | Building value:                            | \$60,350                                       |                                         | Contents value:                    | \$30,175                          |
|                                                                                  |                                            |                                                |                                         |                                    |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                      | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                  |                                   |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 49,789                             |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 36,210                             |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 72,420                             |                                   |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                  |                                   |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 38,473                             |                                   |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 42,999                             |                                   |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 29,421                             |                                   |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 72,420                             |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                  |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 52,052                             |                                   |





| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Carrier Town Hall |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 136 Broadway St. Carrier                       |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.476128                                      | Longitude:                              | - 98.021431                      |                                   |
| WHY CRITICAL:                                                                    |                                            |                                                |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                                |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Rural                                                                            | 1969                                       | 1                                              | Brick                                   | 120.00                           | 35%                               |
| SFHA NO                                                                          | Building value:                            | \$10,200                                       |                                         | Contents value:                  | \$5,100                           |
|                                                                                  |                                            |                                                |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 8,415                            |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 6,120                            |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 12,240                           |                                   |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 6,503                            |                                   |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 7,268                            |                                   |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 4,973                            |                                   |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 12,240                           |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 8,798                            |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: United Church of Christ |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 244 N. 5th Street Carrier                 |                                         | COUNTY:                                | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.47707                                | Longitude:                             | - 98.022821                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                        |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility       | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                        |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                        |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                           | Vulnerability quotient            |
| Rural                                                                            | 1950                      | 2                                         | Brick                                   | 4,000.00                               | 50%                               |
| SFHA NO                                                                          | Building value:           | \$340,000                                 |                                         | Contents value:                        | \$136,000                         |
|                                                                                  |                           |                                           |                                         |                                        |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                          | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                      |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 261,800                                |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 190,400                                |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 380,800                                |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                      |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 202,300                                |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 226,100                                |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 154,700                                |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 380,800                                |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                      |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 273,700                                |                                   |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Covington Fire and Rescue |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 102 West Main Street                |                                         | COUNTY:                                  | Garfield County                   |
|                                                                                  |                           | Latitude:                           | 36.305724                               | Longitude:                               | - 97.587388                       |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                          |                                   |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility         | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                          |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                          |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                             | Vulnerability quotient            |
| Rural                                                                            | 1985                      | 1                                   | Metal                                   | 3,500.00                                 | 25%                               |
| SFHA No                                                                          | Building value:           | \$227,500                           |                                         | Contents value:                          | \$455,000                         |
|                                                                                  |                           |                                     |                                         |                                          |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                            | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                        |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 375,375                                  |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 273,000                                  |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 546,000                                  |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                        |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 290,063                                  |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 324,188                                  |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 221,813                                  |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 546,000                                  |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                        |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 392,438                                  |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                                         |                                          |                                   |





|                                                                                         |                                  |                                            |                        |                                                              |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|--------------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Covington First Bank and Trust Company |                        |
| <b>FACILITY LOCATION:</b> 405 4th Street Covington                                      |                                  | <b>COUNTY:</b> Garfield County             |                        |                                                              |                        |
| Latitude: 36.305662                                                                     |                                  | Longitude: - 97.59042                      |                        |                                                              |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                              |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>               |                        |
| <input type="checkbox"/> <b>Utility</b>                                                 |                                  | <input type="checkbox"/> <b>Resource</b>   |                        | <input checked="" type="checkbox"/> <b>Other</b>             |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                              |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                                 | Vulnerability quotient |
| Rural                                                                                   | 1974                             | 1                                          | Brick                  | 1,087.00                                                     | 35%                    |
| SFHA Yes                                                                                | Building value:                  | \$92,395                                   |                        | Contents value:                                              | \$61,597               |
|                                                                                         |                                  |                                            |                        |                                                              |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                                         | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                                            |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 84,696                                                       |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 61,597                                                       |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 123,194                                                      |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                                            |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 65,447                                                       |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 73,146                                                       |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 50,047                                                       |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 123,194                                                      |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                                            |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 88,545                                                       |                        |

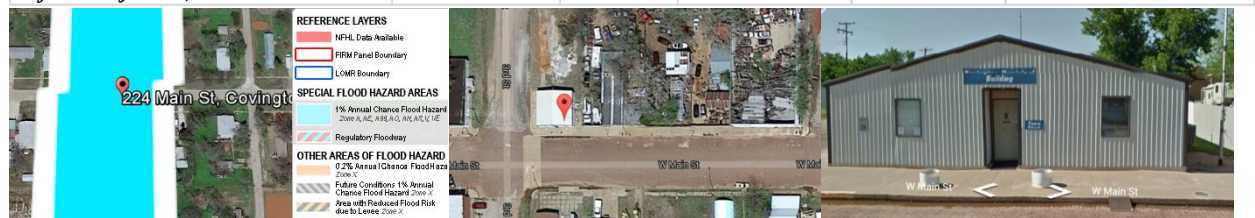


| CRITICAL FACILITY IDENTIFICATION                                                                                                                                                                                                                  |                           |                           |                             | FACILITY NAME: Covington First Baptist Church |                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------------------------|-----------------------------|
| FACILITY LOCATION: 215 Jefferson St. Covington                                                                                                                                                                                                    |                           | COUNTY: Garfield County   |                             |                                               |                             |
| Latitude: 36.306748                                                                                                                                                                                                                               |                           | Longitude: - 97.588355    |                             |                                               |                             |
| WHY CRITICAL: <input type="checkbox"/> Emergency Service <input type="checkbox"/> Government <input type="checkbox"/> Health Service <input type="checkbox"/> Utility <input checked="" type="checkbox"/> Resource <input type="checkbox"/> Other |                           |                           |                             |                                               |                             |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction                                                                                                                                                                  |                           |                           |                             |                                               |                             |
| Location: Rural                                                                                                                                                                                                                                   | Year built: 1960          | Stories: 1                | Type of Construction: Brick | Square Feet: 5,000.00                         | Vulnerability quotient: 60% |
| SFHA YES                                                                                                                                                                                                                                          | Building value: \$425,000 | Contents value: \$212,500 |                             |                                               |                             |
|                                                                                                                                                                                                                                                   | Probability of this risk? | Degree of Impact          | Percent of loss             | Value of loss                                 | NOTES                       |
| Dam Failure                                                                                                                                                                                                                                       | 0%                        | 0%                        | 0.00%                       | 0                                             |                             |
| Drought                                                                                                                                                                                                                                           | 80%                       | 30%                       | 55.00%                      | 350,625                                       |                             |
| Earthquake                                                                                                                                                                                                                                        | 50%                       | 30%                       | 40.00%                      | 255,000                                       |                             |
| Extreme heat                                                                                                                                                                                                                                      | 90%                       | 70%                       | 80.00%                      | 510,000                                       |                             |
| Flooding                                                                                                                                                                                                                                          | 0%                        | 0%                        | 0.00%                       | 0                                             |                             |
| Hail                                                                                                                                                                                                                                              | 70%                       | 15%                       | 42.50%                      | 270,938                                       |                             |
| High winds                                                                                                                                                                                                                                        | 70%                       | 25%                       | 47.50%                      | 302,813                                       |                             |
| Lightning                                                                                                                                                                                                                                         | 50%                       | 15%                       | 32.50%                      | 207,188                                       |                             |
| Tornado                                                                                                                                                                                                                                           | 70%                       | 90%                       | 80.00%                      | 510,000                                       |                             |
| Wildfires                                                                                                                                                                                                                                         | 0%                        | 0%                        | 0.00%                       | 0                                             |                             |
| Winter storms                                                                                                                                                                                                                                     | 70%                       | 45%                       | 57.50%                      | 366,563                                       |                             |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Covington Municipal Building |                                                                  |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|---------------------------------------------|------------------------------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 224 Main Street                                |                                         | COUNTY:                                     | Garfield County                                                  |
|                                                                                  | Latitude:                                  | 36.305984                                      | Longitude:                              | - 97.588656                                 |                                                                  |
| WHY CRITICAL:                                                                    |                                            |                                                |                                         |                                             |                                                                  |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility            | <input type="checkbox"/> Resource <input type="checkbox"/> Other |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                             |                                                                  |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                                | Vulnerability quotient                                           |
| Rural                                                                            | 1980                                       | 1                                              | Metal                                   | 733.00                                      | 40%                                                              |
| SFHA Yes                                                                         | Building value:                            | \$47,654                                       |                                         | Contents value:                             | \$31,763                                                         |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                               | NOTES                                                            |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                           |                                                                  |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 43,679                                      |                                                                  |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 31,767                                      |                                                                  |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 63,534                                      |                                                                  |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                           |                                                                  |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 33,752                                      |                                                                  |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 37,723                                      |                                                                  |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 25,811                                      |                                                                  |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 63,534                                      |                                                                  |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                           |                                                                  |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 45,665                                      |                                                                  |





|                                                                                         |                                  |                                            |                                                |                                                   |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|---------------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Phillips 66 Fueling Station |                                          |
| <b>FACILITY LOCATION:</b> 104 W. Main Street Covington                                  |                                  |                                            |                                                | <b>COUNTY:</b> Garfield County                    |                                          |
| Latitude:                                                                               |                                  | 36.305655                                  | Longitude:                                     |                                                   | - 97.58682                               |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                                   |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>           | <input type="checkbox"/> <b>Resource</b> |
| <input checked="" type="checkbox"/> <b>Other</b>                                        |                                  |                                            |                                                |                                                   |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                   |                                          |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                      | Vulnerability quotient                   |
| Rural                                                                                   | 1980                             | 1                                          | Brick                                          | 5,000.00                                          | 35%                                      |
| SFHA No                                                                                 | Building value:                  | \$425,000                                  |                                                | Contents value:                                   | \$212,500                                |
|                                                                                         |                                  |                                            |                                                |                                                   |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                              | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                                 |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 350,625                                           |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 255,000                                           |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 510,000                                           |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                                 |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 270,938                                           |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 302,813                                           |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 207,188                                           |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 510,000                                           |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                                 |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 366,563                                           |                                          |

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|                                                                                         |                                  |                                     |                                         |                                                   |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                         | <b>FACILITY NAME:</b> Covington Police Department |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 224 Main Street                     |                                         | <b>COUNTY:</b> Garfield County                    |                                   |
|                                                                                         |                                  | Latitude:                           | 36.305984                               | Longitude:                                        | - 97.588656                       |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                         |                                                   |                                   |
| <input checked="" type="checkbox"/> Emergency Service                                   |                                  | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility                  | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                         |                                                   |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                         |                                                   |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                   | Square Feet:                                      | Vulnerability quotient            |
| Rural                                                                                   | 1980                             | 1                                   | Metal                                   | 733.00                                            | 40%                               |
| SFHA Yes                                                                                | Building value:                  | \$47,645                            |                                         | Contents value:                                   | \$31,763                          |
|                                                                                         |                                  |                                     |                                         |                                                   |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                  | <b>Value of loss</b>                              | <b>NOTES</b>                      |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                                   | 0                                                 |                                   |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                                  | 43,674                                            |                                   |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                                  | 31,763                                            |                                   |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                                  | 63,526                                            |                                   |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                                   | 0                                                 |                                   |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                                  | 33,748                                            |                                   |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                                  | 37,719                                            |                                   |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                                  | 25,808                                            |                                   |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                                  | 63,526                                            |                                   |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                                   | 0                                                 |                                   |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                                  | 45,660                                            |                                   |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Covington Post Office |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|--------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 316 West Main Street                           |                                         | COUNTY:                              | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.306005                                      | Longitude:                              | - 97.589723                          |                                   |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility     | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                                |                                         |                                      |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                      |                                   |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                         | Vulnerability quotient            |
| Rural                                                                            | 1989                                       | 1                                              | Metal                                   | 850.00                               | 40%                               |
| SFHA Yes                                                                         | Building value:                            | \$55,250                                       |                                         | Contents value:                      | \$27,625                          |
|                                                                                  |                                            |                                                |                                         |                                      |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                        | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                    |                                   |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 45,581                               |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 33,150                               |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 66,300                               |                                   |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                    |                                   |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 35,222                               |                                   |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 39,366                               |                                   |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 26,934                               |                                   |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 66,300                               |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                    |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 47,653                               |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                                |                                         |                                      |                                   |





|                                                                                         |                                  |                                                       |                        |                                                                |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|------------------------|----------------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                       |                        | <b>FACILITY NAME:</b> Garfield Co. Dist 1 maintenance building |                        |
| <b>FACILITY LOCATION:</b> 504 Eagle Street Douglas Ok                                   |                                  | <b>COUNTY:</b> Garfield County                        |                        |                                                                |                        |
| Latitude: 36.259205                                                                     |                                  | Longitude: - 97.669159                                |                        |                                                                |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                       |                        |                                                                |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input checked="" type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>                 |                        |
|                                                                                         |                                  | <input type="checkbox"/> <b>Utility</b>               |                        | <input type="checkbox"/> <b>Resource</b>                       |                        |
|                                                                                         |                                  |                                                       |                        | <input type="checkbox"/> <b>Other</b>                          |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                       |                        |                                                                |                        |
| Location:                                                                               | Year built:                      | Stories:                                              | Type of Construction:  | Square Feet:                                                   | Vulnerability quotient |
| Rural                                                                                   | 1980                             | 1                                                     | Metal                  | 1,600.00                                                       | 40%                    |
| SFHA No                                                                                 | Building value:                  | \$104,000                                             |                        | Contents value:                                                | \$52,000               |
|                                                                                         |                                  |                                                       |                        |                                                                |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                               | <b>Percent of loss</b> | <b>Value of loss</b>                                           | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                                    | 0.00%                  | 0                                                              |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                                   | 55.00%                 | 85,800                                                         |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                                   | 40.00%                 | 62,400                                                         |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                                   | 80.00%                 | 124,800                                                        |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                                    | 0.00%                  | 0                                                              |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                                   | 42.50%                 | 66,300                                                         |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                                   | 47.50%                 | 74,100                                                         |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                                   | 32.50%                 | 50,700                                                         |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                                   | 80.00%                 | 124,800                                                        |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                                    | 0.00%                  | 0                                                              |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                                   | 57.50%                 | 89,700                                                         |                        |



|                                                                                         |                                  |                                            |                                                |                                              |                                                     |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|----------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Douglas Baptist Church |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 203 Commercial Street                      |                                                | <b>COUNTY:</b> Garfield County               |                                                     |
|                                                                                         |                                  | Latitude:                                  | 36.259154                                      | Longitude:                                   | - 97.670416                                         |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                              |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>      | <input checked="" type="checkbox"/> <b>Resource</b> |
|                                                                                         |                                  | <input type="checkbox"/> <b>Other</b>      |                                                |                                              |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                              |                                                     |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                 | Vulnerability quotient                              |
| Rural                                                                                   | 1950                             | 2                                          | Brick                                          | 3,000.00                                     | 50%                                                 |
| SFHA NO                                                                                 | Building value:                  | \$255,000                                  |                                                | Contents value:                              | \$102,000                                           |
|                                                                                         |                                  |                                            |                                                |                                              |                                                     |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                         | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                            |                                                     |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 196,350                                      |                                                     |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 142,800                                      |                                                     |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 285,600                                      |                                                     |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                            |                                                     |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 151,725                                      |                                                     |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 169,575                                      |                                                     |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 116,025                                      |                                                     |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 285,600                                      |                                                     |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                            |                                                     |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 205,275                                      |                                                     |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                                                       |                                     |                                         | FACILITY NAME: Douglas Fire and Rescue |                                   |
|----------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                                       | 412 Royal Street                    |                                         | COUNTY:                                | Garfield County                   |
|                                                                                  | Latitude:                                             | 36.260309                           | Longitude:                              | - 97.667904                            |                                   |
| WHY CRITICAL:                                                                    |                                                       |                                     |                                         |                                        |                                   |
|                                                                                  | <input checked="" type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility       | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other                        |                                     |                                         |                                        |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                                       |                                     |                                         |                                        |                                   |
| Location:                                                                        | Year built:                                           | Stories:                            | Type of Construction:                   | Square Feet:                           | Vulnerability quotient            |
| Rural                                                                            | 1980                                                  | 1                                   | Metal                                   | 1,000.00                               | 40%                               |
| SFHA No                                                                          | Building value:                                       | \$65,000                            |                                         | Contents value:                        | \$130,000                         |
|                                                                                  |                                                       |                                     |                                         |                                        |                                   |
|                                                                                  | Probability of this risk?                             | Degree of Impact                    | Percent of loss                         | Value of loss                          | NOTES                             |
| Dam Failure                                                                      | 0%                                                    | 0%                                  | 0.00%                                   | 0                                      |                                   |
| Drought                                                                          | 80%                                                   | 30%                                 | 55.00%                                  | 107,250                                |                                   |
| Earthquake                                                                       | 50%                                                   | 30%                                 | 40.00%                                  | 78,000                                 |                                   |
| Extreme heat                                                                     | 90%                                                   | 70%                                 | 80.00%                                  | 156,000                                |                                   |
| Flooding                                                                         | 0%                                                    | 0%                                  | 0.00%                                   | 0                                      |                                   |
| Hail                                                                             | 70%                                                   | 15%                                 | 42.50%                                  | 82,875                                 |                                   |
| High winds                                                                       | 70%                                                   | 25%                                 | 47.50%                                  | 92,625                                 |                                   |
| Lightning                                                                        | 50%                                                   | 15%                                 | 32.50%                                  | 63,375                                 |                                   |
| Tornado                                                                          | 70%                                                   | 90%                                 | 80.00%                                  | 156,000                                |                                   |
| Wildfires                                                                        | 0%                                                    | 0%                                  | 0.00%                                   | 0                                      |                                   |
| Winter storms                                                                    | 70%                                                   | 45%                                 | 57.50%                                  | 112,125                                |                                   |

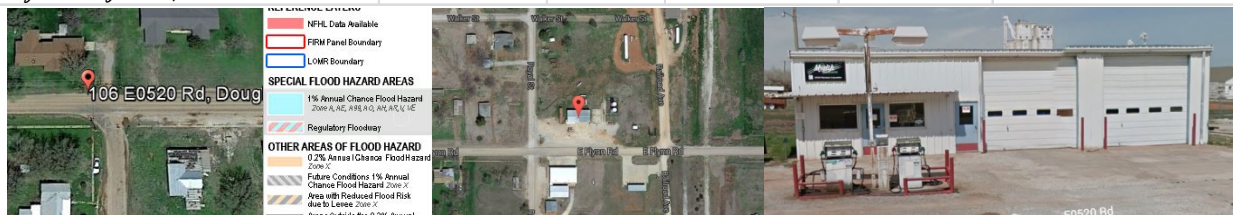
Hazard Mitigation Specialists, LLC





|                                                                                         |                                  |                                            |                        |                                         |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|-----------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Mystic Lubricants |                        |
| <b>FACILITY LOCATION:</b> 106 E0520 Road Douglas Ok                                     |                                  | <b>COUNTY:</b> Garfield County             |                        |                                         |                        |
| Latitude: 36.260576                                                                     |                                  | Longitude: - 97.667697                     |                        |                                         |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                         |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> Health Service |                        |
|                                                                                         |                                  | <input type="checkbox"/> Utility           |                        | <input type="checkbox"/> Resource       |                        |
|                                                                                         |                                  | <input checked="" type="checkbox"/> Other  |                        |                                         |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                         |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                            | Vulnerability quotient |
| Rural                                                                                   | 1970                             | 1                                          | Metal                  | 900.00                                  | 40%                    |
| SFHA No                                                                                 | Building value:                  | \$58,500                                   |                        | Contents value:                         | \$29,250               |
|                                                                                         |                                  |                                            |                        |                                         |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                    | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                       |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 48,263                                  |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 35,100                                  |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 70,200                                  |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                       |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 37,294                                  |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 41,681                                  |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 28,519                                  |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 70,200                                  |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                       |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 50,456                                  |                        |

Hazard Mitigation Specialists, LLC



|                                                                                         |                                  |                                                       |                                         |                                           |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                       |                                         | <b>FACILITY NAME:</b> Douglas Post Office |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 106 E0520 Road Douglas                                |                                         | <b>COUNTY:</b> Garfield County            |                                   |
|                                                                                         |                                  | Latitude:                                             | 36.260165                               | Longitude:                                | - 97667195                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                       |                                         |                                           |                                   |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input checked="" type="checkbox"/> <b>Government</b> | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility          | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                                       |                                         |                                           |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                       |                                         |                                           |                                   |
| Location:                                                                               | Year built:                      | Stories:                                              | Type of Construction:                   | Square Feet:                              | Vulnerability quotient            |
| Rural                                                                                   | 1970                             | 1                                                     | Metal                                   | 350.00                                    | 40%                               |
| SFHA No                                                                                 | Building value:                  | \$22,750                                              |                                         | Contents value:                           | \$11,375                          |
|                                                                                         |                                  |                                                       |                                         |                                           |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                               | <b>Percent of loss</b>                  | <b>Value of loss</b>                      | <b>NOTES</b>                      |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                                    | 0.00%                                   | 0                                         |                                   |
| <b>Drought</b>                                                                          | 80%                              | 30%                                                   | 55.00%                                  | 18,769                                    |                                   |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                                   | 40.00%                                  | 13,650                                    |                                   |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                                   | 80.00%                                  | 27,300                                    |                                   |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                                    | 0.00%                                   | 0                                         |                                   |
| <b>Hail</b>                                                                             | 70%                              | 15%                                                   | 42.50%                                  | 14,503                                    |                                   |
| <b>High winds</b>                                                                       | 70%                              | 25%                                                   | 47.50%                                  | 16,209                                    |                                   |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                                   | 32.50%                                  | 11,091                                    |                                   |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                                   | 80.00%                                  | 27,300                                    |                                   |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                                    | 0.00%                                   | 0                                         |                                   |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                                   | 57.50%                                  | 19,622                                    |                                   |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Drummond City Office |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 424 Main St.                                   |                                         | COUNTY:                             | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.299334                                      | Longitude:                              | -98.036875                          |                                   |
| WHY CRITICAL:                                                                    |                                            |                                                |                                         |                                     |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                                |                                         |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                     |                                   |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                        | Vulnerability quotient            |
| Rural                                                                            | 1930                                       | 1                                              | Brick                                   | 800.00                              | 60%                               |
| SFHA No                                                                          | Building value:                            | \$68,000                                       |                                         | Contents value:                     | \$34,000                          |
|                                                                                  |                                            |                                                |                                         |                                     |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                   |                                   |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 56,100                              |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 40,800                              |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 81,600                              |                                   |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                   |                                   |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 43,350                              |                                   |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 48,450                              |                                   |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 33,150                              |                                   |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 81,600                              |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                   |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 58,650                              |                                   |

Hazard Mitigation Specialists, LLC

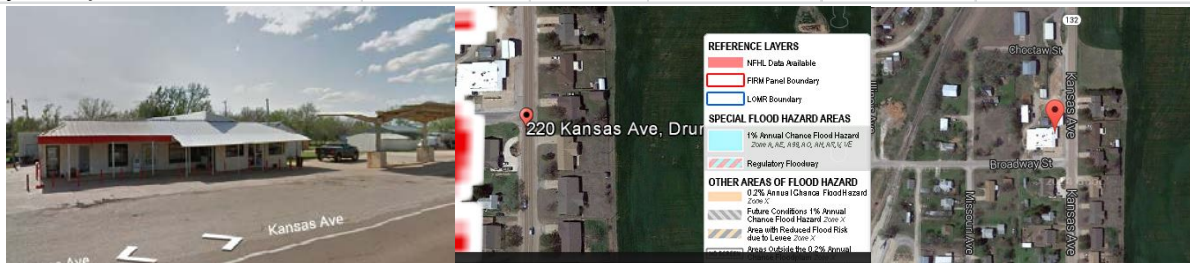




| CRITICAL FACILITY IDENTIFICATION                                                 |                                                       |                                     |                                         | FACILITY NAME: Drummond Fire and Rescue |                                   |
|----------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                                       | 506 Kansas Ave                      |                                         | COUNTY:                                 | Garfield County                   |
|                                                                                  | Latitude:                                             | 36.297021                           | Longitude:                              | -98.032545                              |                                   |
| WHY CRITICAL:                                                                    |                                                       |                                     |                                         |                                         |                                   |
|                                                                                  | <input checked="" type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility        | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other                        |                                     |                                         |                                         |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                                       |                                     |                                         |                                         |                                   |
| Location:                                                                        | Year built:                                           | Stories:                            | Type of Construction:                   | Square Feet:                            | Vulnerability quotient            |
| Rural                                                                            | 1984                                                  | 1                                   | Metal                                   | 3,306.00                                | 25%                               |
| SFHA NO                                                                          | Building value:                                       | \$214,890                           |                                         | Contents value:                         | \$429,780                         |
|                                                                                  |                                                       |                                     |                                         |                                         |                                   |
|                                                                                  | Probability of this risk?                             | Degree of Impact                    | Percent of loss                         | Value of loss                           | NOTES                             |
| Dam Failure                                                                      | 0%                                                    | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Drought                                                                          | 80%                                                   | 30%                                 | 55.00%                                  | 354,569                                 |                                   |
| Earthquake                                                                       | 50%                                                   | 30%                                 | 40.00%                                  | 257,868                                 |                                   |
| Extreme heat                                                                     | 90%                                                   | 70%                                 | 80.00%                                  | 515,736                                 |                                   |
| Flooding                                                                         | 0%                                                    | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Hail                                                                             | 70%                                                   | 15%                                 | 42.50%                                  | 273,985                                 |                                   |
| High winds                                                                       | 70%                                                   | 25%                                 | 47.50%                                  | 306,218                                 |                                   |
| Lightning                                                                        | 50%                                                   | 15%                                 | 32.50%                                  | 209,518                                 |                                   |
| Tornado                                                                          | 70%                                                   | 90%                                 | 80.00%                                  | 515,736                                 |                                   |
| Wildfires                                                                        | 0%                                                    | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Winter storms                                                                    | 70%                                                   | 45%                                 | 57.50%                                  | 370,685                                 |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                                       |                                     |                                         |                                         |                                   |

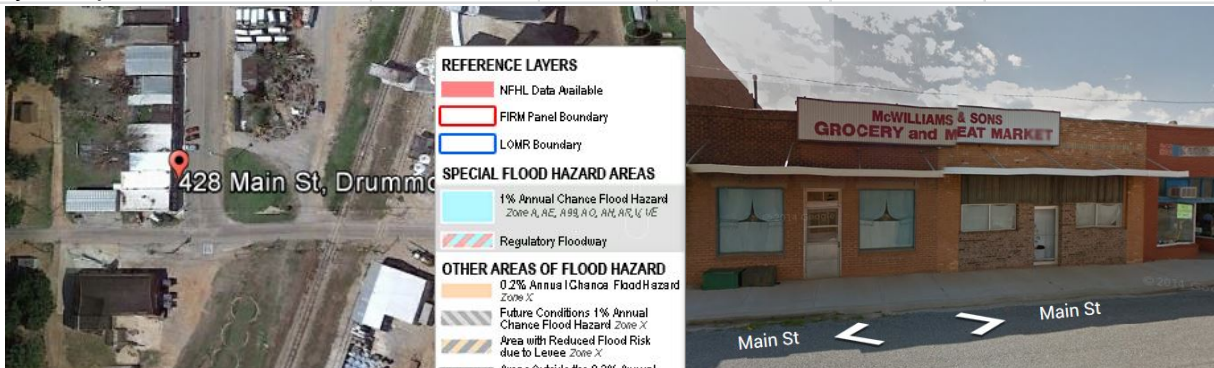


| CRITICAL FACILITY IDENTIFICATION                                                                                                                                                                                                                  |                           |                           |                                        | FACILITY NAME: Henry Quick Trip |                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|----------------------------------------|---------------------------------|-----------------------------|
| FACILITY LOCATION: 220 Kansas Ave Drummond                                                                                                                                                                                                        |                           | COUNTY: Garfield County   |                                        |                                 |                             |
| Latitude: 36.301594                                                                                                                                                                                                                               |                           | Longitude: -98.033112     |                                        |                                 |                             |
| WHY CRITICAL: <input type="checkbox"/> Emergency Service <input type="checkbox"/> Government <input type="checkbox"/> Health Service <input type="checkbox"/> Utility <input type="checkbox"/> Resource <input checked="" type="checkbox"/> Other |                           |                           |                                        |                                 |                             |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction                                                                                                                                                                  |                           |                           |                                        |                                 |                             |
| Location: Rural                                                                                                                                                                                                                                   | Year built: 1980          | Stories: 1                | Type of Construction: Masonry Concrete | Square Feet: 3,600.00           | Vulnerability quotient: 20% |
| SFHA No                                                                                                                                                                                                                                           | Building value: \$306,000 | Contents value: \$153,000 |                                        |                                 |                             |
|                                                                                                                                                                                                                                                   | Probability of this risk? | Degree of Impact          | Percent of loss                        | Value of loss                   | NOTES                       |
| Dam Failure                                                                                                                                                                                                                                       | 0%                        | 0%                        | 0.00%                                  | 0                               |                             |
| Drought                                                                                                                                                                                                                                           | 80%                       | 30%                       | 55.00%                                 | 252,450                         |                             |
| Earthquake                                                                                                                                                                                                                                        | 50%                       | 30%                       | 40.00%                                 | 183,600                         |                             |
| Extreme heat                                                                                                                                                                                                                                      | 90%                       | 70%                       | 80.00%                                 | 367,200                         |                             |
| Flooding                                                                                                                                                                                                                                          | 0%                        | 0%                        | 0.00%                                  | 0                               |                             |
| Hail                                                                                                                                                                                                                                              | 70%                       | 15%                       | 42.50%                                 | 195,075                         |                             |
| High winds                                                                                                                                                                                                                                        | 70%                       | 25%                       | 47.50%                                 | 218,025                         |                             |
| Lightning                                                                                                                                                                                                                                         | 50%                       | 15%                       | 32.50%                                 | 149,175                         |                             |
| Tornado                                                                                                                                                                                                                                           | 70%                       | 90%                       | 80.00%                                 | 367,200                         |                             |
| Wildfires                                                                                                                                                                                                                                         | 0%                        | 0%                        | 0.00%                                  | 0                               |                             |
| Winter storms                                                                                                                                                                                                                                     | 70%                       | 45%                       | 57.50%                                 | 263,925                         |                             |
| Hazard Mitigation Specialists, LLC                                                                                                                                                                                                                |                           |                           |                                        |                                 |                             |



|                                                                                         |                                  |                                            |                                                |                                                                    |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Mc Williams and sons grocery and meat market |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 428 Main street                            |                                                | <b>COUNTY:</b> Garfield County                                     |                                          |
|                                                                                         |                                  | Latitude:                                  | 36.29984                                       | Longitude:                                                         | -98.03689                                |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                                                    |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                            | <input type="checkbox"/> <b>Resource</b> |
| <input checked="" type="checkbox"/> <b>Other</b>                                        |                                  |                                            |                                                |                                                                    |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                                    |                                          |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                                       | Vulnerability quotient                   |
| Rural                                                                                   | 1930                             | 1                                          | Brick                                          | 1,428.00                                                           | 60%                                      |
| SFHA No                                                                                 | Building value:                  | \$121,380                                  |                                                | Contents value:                                                    | \$65,000                                 |
|                                                                                         |                                  |                                            |                                                |                                                                    |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                                               | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                                                  |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 102,509                                                            |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 74,552                                                             |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 149,104                                                            |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                                                  |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 79,212                                                             |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 88,531                                                             |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 60,574                                                             |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 149,104                                                            |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                                                  |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 107,169                                                            |                                          |

Hazard Mitigation Specialists, LLC





|                                                                                         |                                  |                                     |                                         |                                                  |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                         | <b>FACILITY NAME:</b> Drummond Police Department |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 424 Main street                     |                                         | <b>COUNTY:</b> Garfield County                   |                                   |
|                                                                                         |                                  | Latitude:                           | 36.299334                               | Longitude:                                       | -98.036875                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                         |                                                  |                                   |
| <input checked="" type="checkbox"/> Emergency Service                                   |                                  | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility                 | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                         |                                                  |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                         |                                                  |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                   | Square Feet:                                     | Vulnerability quotient            |
| Rural                                                                                   | 1930                             | 1                                   | Brick                                   | 800.00                                           | 60%                               |
| SFHA No                                                                                 | Building value:                  | \$68,000                            |                                         | Contents value:                                  | \$40,000                          |
|                                                                                         |                                  |                                     |                                         |                                                  |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                  | <b>Value of loss</b>                             | <b>NOTES</b>                      |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                  | 0.00%                                   | 0                                                |                                   |
| <b>Drought</b>                                                                          | 80%                              | 30%                                 | 55.00%                                  | 59,400                                           |                                   |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                 | 40.00%                                  | 43,200                                           |                                   |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                 | 80.00%                                  | 86,400                                           |                                   |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                  | 0.00%                                   | 0                                                |                                   |
| <b>Hail</b>                                                                             | 70%                              | 15%                                 | 42.50%                                  | 45,900                                           |                                   |
| <b>High winds</b>                                                                       | 70%                              | 25%                                 | 47.50%                                  | 51,300                                           |                                   |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                 | 32.50%                                  | 35,100                                           |                                   |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                 | 80.00%                                  | 86,400                                           |                                   |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                  | 0.00%                                   | 0                                                |                                   |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                 | 57.50%                                  | 62,100                                           |                                   |

Hazard Mitigation Specialists, LLC



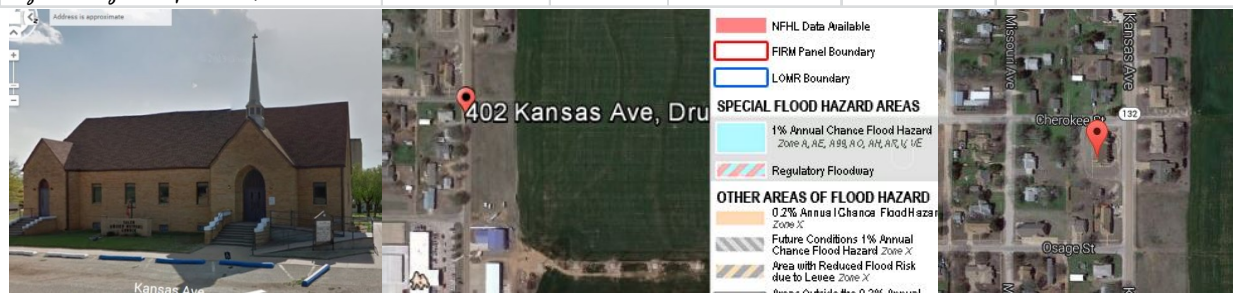
|                                                                                         |                           |                                                       |                                         |                                            |                                   |
|-----------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------|-----------------------------------------|--------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                           |                                                       |                                         | <b>FACILITY NAME:</b> Drummond Post Office |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                           | 319 North Main Street                                 |                                         | <b>COUNTY:</b> Garfield County             |                                   |
|                                                                                         |                           | Latitude:                                             | 36.300335                               | Longitude:                                 | -98.036295                        |
| <b>WHY CRITICAL:</b>                                                                    |                           |                                                       |                                         |                                            |                                   |
| <input type="checkbox"/> Emergency Service                                              |                           | <input checked="" type="checkbox"/> <b>Government</b> | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility           | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                           |                                                       |                                         |                                            |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                           |                                                       |                                         |                                            |                                   |
| Location:                                                                               | Year built:               | Stories:                                              | Type of Construction:                   | Square Feet:                               | Vulnerability quotient            |
| Rural                                                                                   | 1985                      | 1                                                     | Brick                                   | 1,233.00                                   | 20%                               |
| SFHA NO                                                                                 | Building value:           | \$104,805                                             |                                         | Contents value:                            | \$52,403                          |
|                                                                                         |                           |                                                       |                                         |                                            |                                   |
|                                                                                         | Probability of this risk? | Degree of Impact                                      | Percent of loss                         | Value of loss                              | NOTES                             |
| Dam Failure                                                                             | 0%                        | 0%                                                    | 0.00%                                   | 0                                          |                                   |
| Drought                                                                                 | 80%                       | 30%                                                   | 55.00%                                  | 86,464                                     |                                   |
| Earthquake                                                                              | 50%                       | 30%                                                   | 40.00%                                  | 62,883                                     |                                   |
| Extreme heat                                                                            | 90%                       | 70%                                                   | 80.00%                                  | 125,766                                    |                                   |
| Flooding                                                                                | 0%                        | 0%                                                    | 0.00%                                   | 0                                          |                                   |
| Hail                                                                                    | 70%                       | 15%                                                   | 42.50%                                  | 66,813                                     |                                   |
| High winds                                                                              | 70%                       | 25%                                                   | 47.50%                                  | 74,674                                     |                                   |
| Lightning                                                                               | 50%                       | 15%                                                   | 32.50%                                  | 51,093                                     |                                   |
| Tornado                                                                                 | 70%                       | 90%                                                   | 80.00%                                  | 125,766                                    |                                   |
| Wildfires                                                                               | 0%                        | 0%                                                    | 0.00%                                   | 0                                          |                                   |
| Winter storms                                                                           | 70%                       | 45%                                                   | 57.50%                                  | 90,395                                     |                                   |

Hazard Mitigation Specialists, LLC



|                                                                                         |                           |                                            |                                                |                                                              |                                                     |
|-----------------------------------------------------------------------------------------|---------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                           |                                            |                                                | <b>FACILITY NAME:</b> Drummond Salem united Methodist Church |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                           | 402 Kansas Ave                             |                                                | <b>COUNTY:</b> Garfield County                               |                                                     |
|                                                                                         |                           | Latitude:                                  | 36.299776                                      | Longitude:                                                   | -98.03325                                           |
| <b>WHY CRITICAL:</b>                                                                    |                           |                                            |                                                |                                                              |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                           | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                      | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                   |                           |                                            |                                                |                                                              |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                           |                                            |                                                |                                                              |                                                     |
| Location:                                                                               | Year built:               | Stories:                                   | Type of Construction:                          | Square Feet:                                                 | Vulnerability quotient                              |
| Rural                                                                                   | 1974                      | 1                                          | Brick                                          | 2,064.00                                                     | 35%                                                 |
| SFHA NO                                                                                 | Building value:           | \$175,440                                  |                                                | Contents value:                                              | \$87,720                                            |
|                                                                                         |                           |                                            |                                                |                                                              |                                                     |
|                                                                                         | Probability of this risk? | Degree of Impact                           | Percent of loss                                | Value of loss                                                | NOTES                                               |
| Dam Failure                                                                             | 0%                        | 0%                                         | 0.00%                                          | 0                                                            |                                                     |
| Drought                                                                                 | 80%                       | 30%                                        | 55.00%                                         | 144,738                                                      |                                                     |
| Earthquake                                                                              | 50%                       | 30%                                        | 40.00%                                         | 105,264                                                      |                                                     |
| Extreme heat                                                                            | 90%                       | 70%                                        | 80.00%                                         | 210,528                                                      |                                                     |
| Flooding                                                                                | 0%                        | 0%                                         | 0.00%                                          | 0                                                            |                                                     |
| Hail                                                                                    | 70%                       | 15%                                        | 42.50%                                         | 111,843                                                      |                                                     |
| High winds                                                                              | 70%                       | 25%                                        | 47.50%                                         | 125,001                                                      |                                                     |
| Lightning                                                                               | 50%                       | 15%                                        | 32.50%                                         | 85,527                                                       |                                                     |
| Tornado                                                                                 | 70%                       | 90%                                        | 80.00%                                         | 210,528                                                      |                                                     |
| Wildfires                                                                               | 0%                        | 0%                                         | 0.00%                                          | 0                                                            |                                                     |
| Winter storms                                                                           | 70%                       | 45%                                        | 57.50%                                         | 151,317                                                      |                                                     |

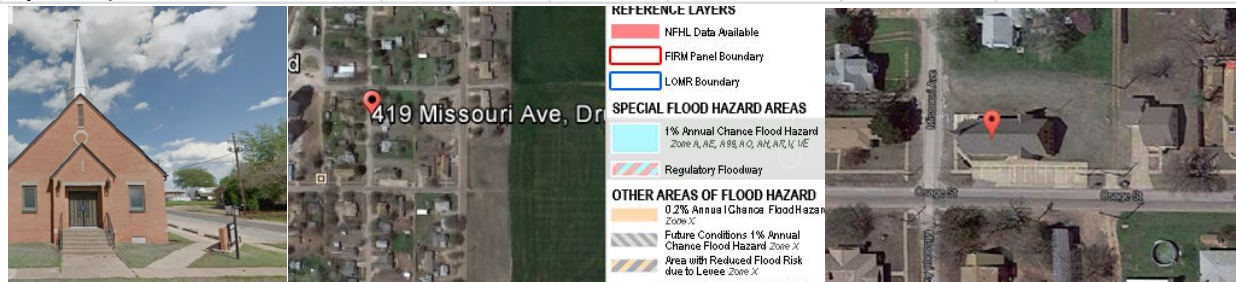
Hazard Mitigation Specialists, LLC





|                                                                                        |                                  |                                            |                                                |                                                        |                                                     |
|----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                  |                                            |                                                | <b>FACILITY NAME:</b> Drummond United Church of Christ |                                                     |
| <b>FACILITY LOCATION:</b>                                                              |                                  | 419 Missouri St.                           |                                                | <b>COUNTY:</b> Garfield County                         |                                                     |
|                                                                                        |                                  | Latitude:                                  | 36.299171                                      | Longitude:                                             | -98.033986                                          |
| <b>WHY CRITICAL:</b>                                                                   |                                  |                                            |                                                |                                                        |                                                     |
| <input type="checkbox"/> Emergency Service                                             |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                  |                                  |                                            |                                                |                                                        |                                                     |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                        |                                                     |
| Location:                                                                              | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                           | Vulnerability quotient                              |
| Rural                                                                                  | 1974                             | 2                                          | Brick                                          | 2,636.00                                               | 35%                                                 |
| SFHA No                                                                                | Building value:                  | \$224,060                                  |                                                | Contents value:                                        | \$112,030                                           |
|                                                                                        |                                  |                                            |                                                |                                                        |                                                     |
|                                                                                        | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                                   | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                     | 0%                               | 0%                                         | 0.00%                                          | 0                                                      |                                                     |
| <b>Drought</b>                                                                         | 80%                              | 30%                                        | 55.00%                                         | 184,850                                                |                                                     |
| <b>Earthquake</b>                                                                      | 50%                              | 30%                                        | 40.00%                                         | 134,436                                                |                                                     |
| <b>Extreme heat</b>                                                                    | 90%                              | 70%                                        | 80.00%                                         | 268,872                                                |                                                     |
| <b>Flooding</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                                      |                                                     |
| <b>Hail</b>                                                                            | 70%                              | 15%                                        | 42.50%                                         | 142,838                                                |                                                     |
| <b>High winds</b>                                                                      | 70%                              | 25%                                        | 47.50%                                         | 159,643                                                |                                                     |
| <b>Lightning</b>                                                                       | 50%                              | 15%                                        | 32.50%                                         | 109,229                                                |                                                     |
| <b>Tornado</b>                                                                         | 70%                              | 90%                                        | 80.00%                                         | 268,872                                                |                                                     |
| <b>Wildfires</b>                                                                       | 0%                               | 0%                                         | 0.00%                                          | 0                                                      |                                                     |
| <b>Winter storms</b>                                                                   | 70%                              | 45%                                        | 57.50%                                         | 193,252                                                |                                                     |

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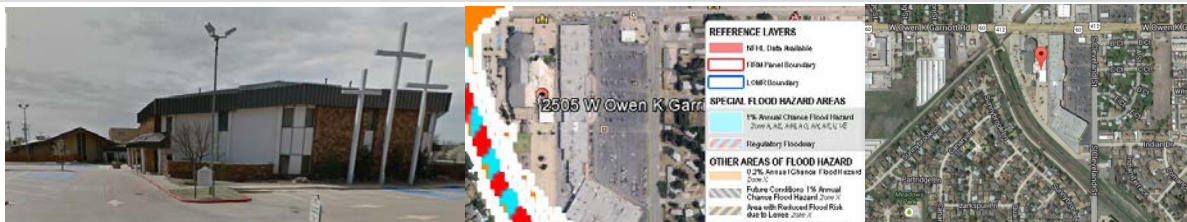
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|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Care and Share food Pantry and Calvary Baptist church |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 831 E. Broadway Enid                       |                                                | <b>COUNTY:</b> Garfield County                                              |                                                     |
|                                                                                         |                                  | Latitude:                                  | 36.396411                                      | Longitude:                                                                  | - 97.865737                                         |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                                                             |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                                     | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                   |                                  |                                            |                                                |                                                                             |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                                             |                                                     |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                                                | Vulnerability quotient                              |
| Metropolitan                                                                            | 1980                             | 1                                          | Brick                                          | 7,000.00                                                                    | 35%                                                 |
| SFHA NO                                                                                 | Building value:                  | \$595,000                                  |                                                | Contents value:                                                             | \$297,500                                           |
|                                                                                         |                                  |                                            |                                                |                                                                             |                                                     |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                                                        | <b>NOTES</b>                                        |
| Dam Failure                                                                             | 0%                               | 0%                                         | 0.00%                                          | 0                                                                           |                                                     |
| Drought                                                                                 | 80%                              | 30%                                        | 55.00%                                         | 490,875                                                                     |                                                     |
| Earthquake                                                                              | 50%                              | 30%                                        | 40.00%                                         | 357,000                                                                     |                                                     |
| Extreme heat                                                                            | 90%                              | 70%                                        | 80.00%                                         | 714,000                                                                     |                                                     |
| Flooding                                                                                | 0%                               | 0%                                         | 0.00%                                          | 0                                                                           |                                                     |
| Hail                                                                                    | 70%                              | 15%                                        | 42.50%                                         | 379,313                                                                     |                                                     |
| High winds                                                                              | 70%                              | 15%                                        | 42.50%                                         | 379,313                                                                     |                                                     |
| Lightning                                                                               | 50%                              | 15%                                        | 32.50%                                         | 290,063                                                                     |                                                     |
| Tornado                                                                                 | 70%                              | 90%                                        | 80.00%                                         | 714,000                                                                     |                                                     |
| Wildfires                                                                               | 0%                               | 0%                                         | 0.00%                                          | 0                                                                           |                                                     |
| Winter storms                                                                           | 70%                              | 45%                                        | 57.50%                                         | 513,188                                                                     |                                                     |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Emmanuel Baptist church      |                                              |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 2505 W. Owen K. Garriot Enid        |                                         | COUNTY:                                     | Garfield County                              |
|                                                                                  | Latitude:                                  | 36.390227                           | Longitude:                              | - 97.910157                                 |                                              |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input checked="" type="checkbox"/> Utility | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                                            |                                     |                                         |                                             |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                             |                                              |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                                | Vulnerability quotient                       |
| Metropolitan                                                                     | 1964                                       | 2                                   | Brick/Metal                             | 50,000.00                                   | 35%                                          |
| SFHA NO                                                                          | Building value:                            | \$4,250,000                         |                                         | Contents value:                             | \$1,700,000                                  |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                               | NOTES                                        |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 3,272,500                                   |                                              |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 2,380,000                                   |                                              |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 4,760,000                                   |                                              |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,528,750                                   |                                              |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 2,826,250                                   |                                              |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 1,933,750                                   |                                              |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 4,760,000                                   |                                              |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 3,421,250                                   |                                              |

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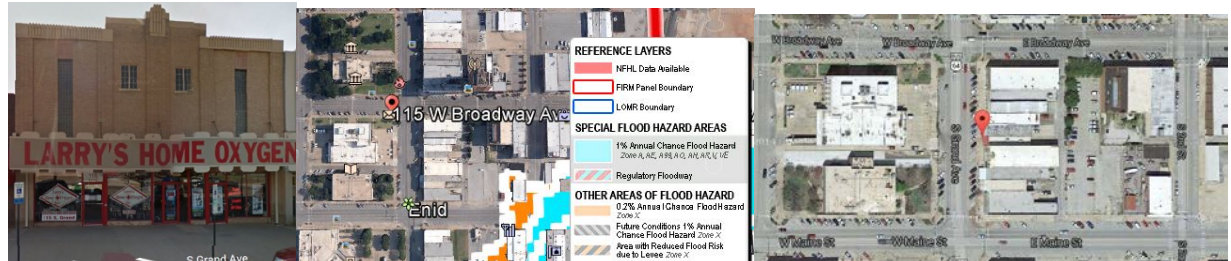






| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                                    | FACILITY NAME: Larry's Home Oxygen |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|----------------------------------------------------|------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 115 W. Broadway Enid                |                                                    | COUNTY:                            | Garfield County                   |
|                                                                                  | Latitude:                 | 36.395956                           | Longitude:                                         | - 97.878121                        |                                   |
| WHY CRITICAL:                                                                    |                           |                                     |                                                    |                                    |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility   | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                                    |                                    |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                                    |                                    |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                              | Square Feet:                       | Vulnerability quotient            |
| Metropolitan                                                                     | 1963                      | 2                                   | Masonry Concrete                                   | 6,820.00                           | 60%                               |
| SFHA No                                                                          | Building value:           | \$579,700                           |                                                    | Contents value:                    | \$289,850                         |
|                                                                                  |                           |                                     |                                                    |                                    |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                                    | Value of loss                      | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                              | 0                                  |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                             | 478,253                            |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                             | 347,820                            |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                             | 695,640                            |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                              | 0                                  |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                             | 369,559                            |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                             | 413,036                            |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                             | 282,604                            |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                             | 695,640                            |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                              | 0                                  |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                             | 499,991                            |                                   |

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|                                                                                         |                                  |                                            |                        |                                                        |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|--------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> New Hope United Methodist Church |                        |
| <b>FACILITY LOCATION:</b> 614 N. Garland Rd Enid                                        |                                  | <b>COUNTY:</b> Garfield county             |                        |                                                        |                        |
| Latitude: 36.402465                                                                     |                                  | Longitude: - 97.945037                     |                        |                                                        |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                        |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>         |                        |
|                                                                                         |                                  | <input type="checkbox"/> <b>Utility</b>    |                        | <input checked="" type="checkbox"/> <b>Resource</b>    |                        |
|                                                                                         |                                  |                                            |                        | <input type="checkbox"/> <b>Other</b>                  |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                        |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                           | Vulnerability quotient |
| Urban                                                                                   | 1980                             | 1                                          | Brick                  | 8,657.00                                               | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$735,845                                  |                        | Contents value:                                        | \$367,923              |
|                                                                                         |                                  |                                            |                        |                                                        |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                                   | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                                      |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 607,072                                                |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 441,507                                                |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 883,014                                                |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                                      |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 469,101                                                |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 524,290                                                |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 358,725                                                |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 883,014                                                |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                                      |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 634,667                                                |                        |

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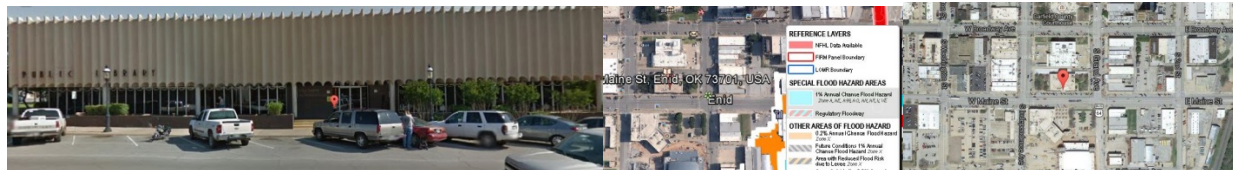
|                                                                                         |                                  |                                     |                        |                                                    |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|------------------------|----------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                        | <b>FACILITY NAME:</b> Ocean Dental                 |                        |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 913 Maple Ave Enid                  |                        | <b>COUNTY:</b> Garfield County                     |                        |
|                                                                                         |                                  | Latitude:                           | 36.398698              | Longitude:                                         | - 97.889699            |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                        |                                                    |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government |                        | <input checked="" type="checkbox"/> Health Service |                        |
| <input type="checkbox"/> Utility                                                        |                                  | <input type="checkbox"/> Resource   |                        | <input type="checkbox"/> Other                     |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                        |                                                    |                        |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:  | Square Feet:                                       | Vulnerability quotient |
| Metropolitan                                                                            | 1980                             | 1                                   | Brick/Metal            | 1,310.00                                           | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$111,350                           |                        | Contents value:                                    | \$167,025              |
|                                                                                         |                                  |                                     |                        |                                                    |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b> | <b>Value of loss</b>                               | <b>NOTES</b>           |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                  | 0                                                  |                        |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                 | 153,106                                            |                        |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                 | 111,350                                            |                        |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                 | 222,700                                            |                        |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                  | 0                                                  |                        |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                 | 118,309                                            |                        |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                 | 132,228                                            |                        |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                 | 90,472                                             |                        |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                 | 222,700                                            |                        |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                  | 0                                                  |                        |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                 | 160,066                                            |                        |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                                |                       | FACILITY NAME: Enid Public Library      |                                  |
|----------------------------------------------------------------------------------|---------------------------|------------------------------------------------|-----------------------|-----------------------------------------|----------------------------------|
| FACILITY LOCATION:                                                               |                           | 120 W. Maine St Enid                           |                       | COUNTY:                                 | Garfield County                  |
|                                                                                  |                           | Latitude:                                      | 36.395625             | Longitude:                              | - 97.879083                      |
| WHY CRITICAL:                                                                    |                           |                                                |                       |                                         |                                  |
| <input type="checkbox"/> Emergency Service                                       |                           | <input checked="" type="checkbox"/> Government |                       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility |
|                                                                                  |                           |                                                |                       | <input type="checkbox"/> Resource       | <input type="checkbox"/> Other   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                                |                       |                                         |                                  |
| Location:                                                                        | Year built:               | Stories:                                       | Type of Construction: | Square Feet:                            | Vulnerability quotient           |
| Metropolitan                                                                     | 1964                      | 2                                              | Masonry Concrete      | 16,000.00                               | 35%                              |
| SFHA No                                                                          | Building value:           | \$1,360,000                                    |                       | Contents value:                         | \$680,000                        |
|                                                                                  |                           |                                                |                       |                                         |                                  |
|                                                                                  | Probability of this risk? | Degree of Impact                               | Percent of loss       | Value of loss                           | NOTES                            |
| Dam Failure                                                                      | 0%                        | 0%                                             | 0.00%                 | 0                                       |                                  |
| Drought                                                                          | 80%                       | 30%                                            | 55.00%                | 1,122,000                               |                                  |
| Earthquake                                                                       | 50%                       | 30%                                            | 40.00%                | 816,000                                 |                                  |
| Extreme heat                                                                     | 90%                       | 70%                                            | 80.00%                | 1,632,000                               |                                  |
| Flooding                                                                         | 0%                        | 0%                                             | 0.00%                 | 0                                       |                                  |
| Hail                                                                             | 70%                       | 15%                                            | 42.50%                | 867,000                                 |                                  |
| High winds                                                                       | 70%                       | 25%                                            | 47.50%                | 969,000                                 |                                  |
| Lightning                                                                        | 50%                       | 15%                                            | 32.50%                | 663,000                                 |                                  |
| Tornado                                                                          | 70%                       | 90%                                            | 80.00%                | 1,632,000                               |                                  |
| Wildfires                                                                        | 0%                        | 0%                                             | 0.00%                 | 0                                       |                                  |
| Winter storms                                                                    | 70%                       | 45%                                            | 57.50%                | 1,173,000                               |                                  |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Salvation Army Church |                                              |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|--------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 220 West Pine Avenue                |                                         | COUNTY:                              | Garfield County                              |
|                                                                                  | Latitude:                                  | 36.401528                           | Longitude:                              | - 97.880906                          |                                              |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                      |                                              |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility     | <input checked="" type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                     |                                         |                                      |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                      |                                              |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                         | Vulnerability quotient                       |
| Metropolitan                                                                     | 1970                                       | 1                                   | Brick                                   | 5,200.00                             | 35%                                          |
| SFHA No                                                                          | Building value:                            | \$442,000                           |                                         | Contents value:                      | \$221,000                                    |
|                                                                                  |                                            |                                     |                                         |                                      |                                              |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                        | NOTES                                        |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                    |                                              |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 364,650                              |                                              |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 265,200                              |                                              |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 530,400                              |                                              |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                    |                                              |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 281,775                              |                                              |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 314,925                              |                                              |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 215,475                              |                                              |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 530,400                              |                                              |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                    |                                              |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 381,225                              |                                              |



|                                                                                         |                                  |                                            |                                                |                                                                            |                                                     |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Salvation Army Offices and Community outreach center |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 516 North Independence Ave<br>Enid         |                                                | <b>COUNTY:</b> Garfield County                                             |                                                     |
|                                                                                         |                                  | Latitude:                                  | 36.401823                                      | Longitude:                                                                 | - 97.880295                                         |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                                                            |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                                    | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                   |                                  |                                            |                                                |                                                                            |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                                            |                                                     |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                                               | Vulnerability quotient                              |
| metropolitan                                                                            | 1964                             | 1                                          | Brick/Metal                                    | 6,233.00                                                                   | 35%                                                 |
| SFHA NO                                                                                 | Building value:                  | \$529,805                                  |                                                | Contents value:                                                            | \$353,204                                           |
|                                                                                         |                                  |                                            |                                                |                                                                            |                                                     |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                                                       | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                                                          |                                                     |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 485,655                                                                    |                                                     |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 353,204                                                                    |                                                     |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 706,407                                                                    |                                                     |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                                                          |                                                     |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 375,279                                                                    |                                                     |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 419,429                                                                    |                                                     |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 286,978                                                                    |                                                     |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 706,407                                                                    |                                                     |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                                                          |                                                     |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 507,730                                                                    |                                                     |

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|                                                                                         |                                  |                                                  |                        |                                                |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------|------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                  |                        | <b>FACILITY NAME:</b> United Super Market      |                        |
| <b>FACILITY LOCATION:</b> 531 E. Broadway Ave Enid                                      |                                  | <b>COUNTY:</b> Garfield County                   |                        |                                                |                        |
| Latitude: 36.396336                                                                     |                                  | Longitude: - 97.870595                           |                        |                                                |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                  |                        |                                                |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b>       |                        | <input type="checkbox"/> <b>Health Service</b> |                        |
|                                                                                         |                                  | <input type="checkbox"/> <b>Utility</b>          |                        | <input type="checkbox"/> <b>Resource</b>       |                        |
|                                                                                         |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                        |                                                |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                        |                                                |                        |
| Location:                                                                               | Year built:                      | Stories:                                         | Type of Construction:  | Square Feet:                                   | Vulnerability quotient |
| Metropolitan                                                                            | 1980                             | 1                                                | Masonry Concrete       | 11,187.00                                      | 35%                    |
| SFHA Yes                                                                                | Building value:                  | \$950,895                                        |                        | Contents value:                                | \$475,447              |
|                                                                                         |                                  |                                                  |                        |                                                |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b> | <b>Value of loss</b>                           | <b>NOTES</b>           |
| Dam Failure                                                                             | 0%                               | 0%                                               | 0.00%                  | 0                                              |                        |
| Drought                                                                                 | 80%                              | 30%                                              | 55.00%                 | 784,488                                        |                        |
| Earthquake                                                                              | 50%                              | 30%                                              | 40.00%                 | 570,537                                        |                        |
| Extreme heat                                                                            | 90%                              | 70%                                              | 80.00%                 | 1,141,074                                      |                        |
| Flooding                                                                                | 0%                               | 0%                                               | 0.00%                  | 0                                              |                        |
| Hail                                                                                    | 70%                              | 15%                                              | 42.50%                 | 606,195                                        |                        |
| High winds                                                                              | 70%                              | 25%                                              | 47.50%                 | 677,512                                        |                        |
| Lightning                                                                               | 50%                              | 15%                                              | 32.50%                 | 463,561                                        |                        |
| Tornado                                                                                 | 70%                              | 90%                                              | 80.00%                 | 1,141,074                                      |                        |
| Wildfires                                                                               | 0%                               | 0%                                               | 0.00%                  | 0                                              |                        |
| Winter storms                                                                           | 70%                              | 45%                                              | 57.50%                 | 820,147                                        |                        |



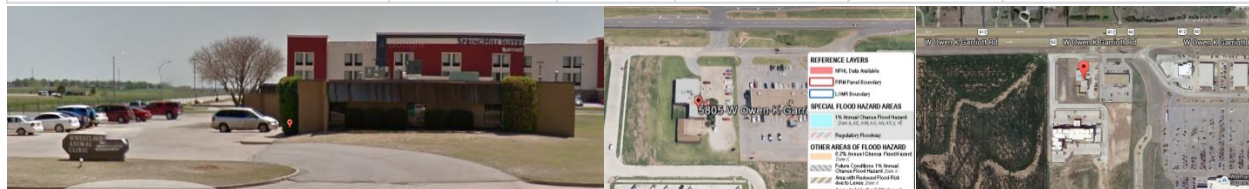


| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Security National Bank |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 201 W Maine St                      |                                         | COUNTY:                               | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.395237                           | Longitude:                              | - 97.88019                            |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                       |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility      | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                       |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                       |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                          | Vulnerability quotient            |
| Metropolitan                                                                     | 1980                                       | 1                                   | Masonry Concrete                        | 2,894.00                              | 35%                               |
| SFHA NO                                                                          | Building value:                            | \$245,990                           |                                         | Contents value:                       | \$163,994                         |
|                                                                                  |                                            |                                     |                                         |                                       |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                         | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                     |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 225,491                               |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 163,994                               |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 327,987                               |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                     |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 174,243                               |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 194,742                               |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 133,245                               |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 327,987                               |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                     |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 235,741                               |                                   |

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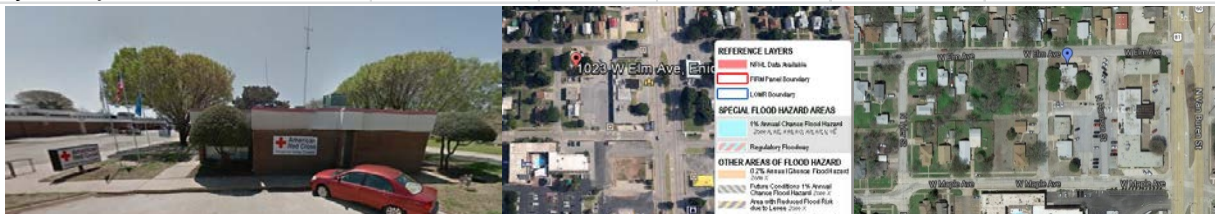


|                                                                                         |                                  |                                            |                        |                                                  |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|--------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Wheatland Animal Clinic    |                        |
| <b>FACILITY LOCATION:</b> 5805 W. Owen K. Garriot Enid                                  |                                  | <b>COUNTY:</b> Garfield County             |                        |                                                  |                        |
| Latitude: 36.390028                                                                     |                                  | Longitude: - 97.948937                     |                        |                                                  |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                  |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>   |                        |
| <input type="checkbox"/> <b>Utility</b>                                                 |                                  | <input type="checkbox"/> <b>Resource</b>   |                        | <input checked="" type="checkbox"/> <b>Other</b> |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                  |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                     | Vulnerability quotient |
| Urban                                                                                   | 1980                             | 1                                          | Brick                  | 2,392.00                                         | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$203,320                                  |                        | Contents value:                                  | \$304,980              |
|                                                                                         |                                  |                                            |                        |                                                  |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                             | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                                |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 279,565                                          |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 203,320                                          |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 406,640                                          |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                                |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 216,028                                          |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 241,443                                          |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 165,198                                          |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 406,640                                          |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                                |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 292,273                                          |                        |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: American Red Cross |                                              |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                           | 1023 W. Elm Ave Enid                |                                         | COUNTY:                           | Garfield County                              |
|                                                                                  |                           | Latitude:                           | 36.399986                               | Longitude:                        | - 97.891154                                  |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                   |                                              |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility  | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                   |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                   |                                              |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                      | Vulnerability quotient                       |
| Metropolitan                                                                     | 1980                      | 1                                   | Brick                                   | 1,500.00                          | 35%                                          |
| SFHA NO                                                                          | Building value:           | \$127,500                           |                                         | Contents value:                   | \$63,750                                     |
|                                                                                  |                           |                                     |                                         |                                   |                                              |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                     | NOTES                                        |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                 |                                              |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 105,188                           |                                              |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 76,500                            |                                              |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 153,000                           |                                              |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                 |                                              |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 81,281                            |                                              |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 90,844                            |                                              |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 62,156                            |                                              |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 153,000                           |                                              |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                 |                                              |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 109,969                           |                                              |

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|                                                                                         |                                  |                                     |                        |                                                    |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|------------------------|----------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                        | <b>FACILITY NAME:</b> Animal Care Clinic of Enid   |                        |
| <b>FACILITY LOCATION:</b> 1900 E. Southgate RD Enid                                     |                                  | <b>COUNTY:</b> Garfield County      |                        |                                                    |                        |
| Latitude: 36.362147                                                                     |                                  | Longitude: - 97.849527              |                        |                                                    |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                        |                                                    |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government |                        | <input checked="" type="checkbox"/> Health Service |                        |
| <input type="checkbox"/> Utility                                                        |                                  | <input type="checkbox"/> Resource   |                        | <input type="checkbox"/> Other                     |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                        |                                                    |                        |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:  | Square Feet:                                       | Vulnerability quotient |
| Urban                                                                                   | 1980                             | 1                                   | Brick/Metal            | 2,669.00                                           | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$226,865                           |                        | Contents value:                                    | \$340,298              |
|                                                                                         |                                  |                                     |                        |                                                    |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b> | <b>Value of loss</b>                               | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                  | 0.00%                  | 0                                                  |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                 | 55.00%                 | 311,940                                            |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                 | 40.00%                 | 226,865                                            |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                 | 80.00%                 | 453,730                                            |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                  | 0.00%                  | 0                                                  |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                 | 42.50%                 | 241,044                                            |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                 | 47.50%                 | 269,402                                            |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                 | 32.50%                 | 184,328                                            |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                 | 80.00%                 | 453,730                                            |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                  | 0.00%                  | 0                                                  |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                 | 57.50%                 | 326,119                                            |                        |

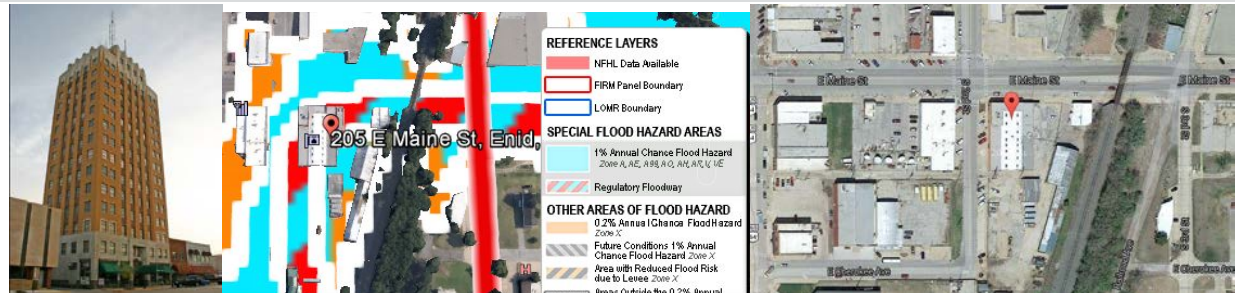


| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Best Shell Fueling Station |                                              |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|-------------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                           | 2318 N. Grand Street Enid           |                                         | COUNTY:                                   | Garfield County                              |
|                                                                                  |                           | Latitude:                           | 36.419598                               | Longitude:                                | - 97.878789                                  |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                           |                                              |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility          | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                           |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                           |                                              |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                              | Vulnerability quotient                       |
| Metropolitan                                                                     | 1980                      | 1                                   | Masonry Concrete                        | 1,381.00                                  | 35%                                          |
| SFHA NO                                                                          | Building value:           | \$117,895                           |                                         | Contents value:                           | \$78,596                                     |
|                                                                                  |                           |                                     |                                         |                                           |                                              |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                             | NOTES                                        |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                         |                                              |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 108,070                                   |                                              |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 78,596                                    |                                              |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 157,193                                   |                                              |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                         |                                              |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 83,509                                    |                                              |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 93,333                                    |                                              |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 63,860                                    |                                              |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 157,193                                   |                                              |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                         |                                              |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 112,982                                   |                                              |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                                         |                                           |                                              |



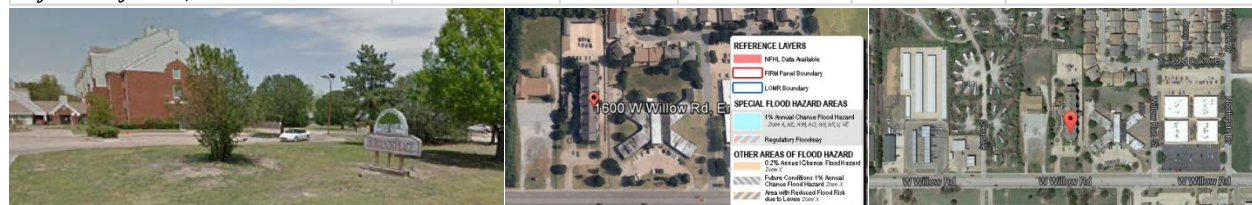
| CRITICAL FACILITY IDENTIFICATION                                                 |                                                      |                                     |                                         | FACILITY NAME:                     |                                   |
|----------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------|-----------------------------------------|------------------------------------|-----------------------------------|
|                                                                                  |                                                      |                                     |                                         | Broadway Tower Historical Building |                                   |
| FACILITY LOCATION:                                                               |                                                      | 205 E. Maine St Enid                |                                         | COUNTY:                            | Garfield county                   |
|                                                                                  |                                                      | Latitude:                           | 36.395206                               | Longitude:                         | - 97.876366                       |
|                                                                                  |                                                      |                                     |                                         |                                    |                                   |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility   | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other Historical |                                     |                                         |                                    |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                                      |                                     |                                         |                                    |                                   |
| Location:                                                                        | Year built:                                          | Stories:                            | Type of Construction:                   | Square Feet:                       | Vulnerability quotient            |
| Metropolitan                                                                     | 1931                                                 | 15                                  | Masonry concrete                        | 112,500.00                         | 70%                               |
| SFHA Yes                                                                         | Building value:                                      | \$9,562,500                         |                                         | Contents value:                    | \$3,825,000                       |
|                                                                                  |                                                      |                                     |                                         |                                    |                                   |
|                                                                                  | Probability of this risk?                            | Degree of Impact                    | Percent of loss                         | Value of loss                      | NOTES                             |
| Dam Failure                                                                      | 0%                                                   | 0%                                  | 0.00%                                   | 0                                  |                                   |
| Drought                                                                          | 80%                                                  | 30%                                 | 55.00%                                  | 7,363,125                          |                                   |
| Earthquake                                                                       | 50%                                                  | 30%                                 | 40.00%                                  | 5,355,000                          |                                   |
| Extreme heat                                                                     | 90%                                                  | 70%                                 | 80.00%                                  | 10,710,000                         |                                   |
| Flooding                                                                         | 0%                                                   | 0%                                  | 0.00%                                   | 0                                  |                                   |
| Hail                                                                             | 70%                                                  | 15%                                 | 42.50%                                  | 5,689,688                          |                                   |
| High winds                                                                       | 70%                                                  | 25%                                 | 47.50%                                  | 6,359,063                          |                                   |
| Lightning                                                                        | 50%                                                  | 15%                                 | 32.50%                                  | 4,350,938                          |                                   |
| Tornado                                                                          | 70%                                                  | 90%                                 | 80.00%                                  | 10,710,000                         |                                   |
| Wildfires                                                                        | 0%                                                   | 0%                                  | 0.00%                                   | 0                                  |                                   |
| Winter storms                                                                    | 70%                                                  | 45%                                 | 57.50%                                  | 7,697,813                          |                                   |

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|                                                                                         |                                  |                                     |                        |                                                      |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|------------------------|------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                        | <b>FACILITY NAME:</b> Burgundy Place Assisted Living |                        |
| <b>FACILITY LOCATION:</b> 1600 W. Willow Rd. Enid                                       |                                  | <b>COUNTY:</b> Garfield County      |                        |                                                      |                        |
| Latitude: 36.420454                                                                     |                                  | Longitude: - 97.896006              |                        |                                                      |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                        |                                                      |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government |                        | <input checked="" type="checkbox"/> Health Service   |                        |
| <input type="checkbox"/> Utility                                                        |                                  | <input type="checkbox"/> Resource   |                        | <input type="checkbox"/> Other                       |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                        |                                                      |                        |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:  | Square Feet:                                         | Vulnerability quotient |
| Metropolitan                                                                            | 1970                             | 3                                   | Brick                  | 28,000.00                                            | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$2,380,000                         |                        | Contents value:                                      | \$1,190,000            |
|                                                                                         |                                  |                                     |                        |                                                      |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b> | <b>Value of loss</b>                                 | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                  | 0.00%                  | 0                                                    |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                 | 55.00%                 | 1,963,500                                            |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                 | 40.00%                 | 1,428,000                                            |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                 | 80.00%                 | 2,856,000                                            |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                  | 0.00%                  | 0                                                    |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                 | 42.50%                 | 1,517,250                                            |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                 | 47.50%                 | 1,695,750                                            |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                 | 32.50%                 | 1,160,250                                            |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                 | 80.00%                 | 2,856,000                                            |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                  | 0.00%                  | 0                                                    |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                 | 57.50%                 | 2,052,750                                            |                        |



|                                                                                         |                                  |                                            |                                                |                                            |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Childrens Day School |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 715 W. Maple Ave Enid                      |                                                | <b>COUNTY:</b> Garfield County             |                                          |
|                                                                                         |                                  | Latitude:                                  | 36.398792                                      | Longitude:                                 | - 97.887242                              |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                            |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>    | <input type="checkbox"/> <b>Resource</b> |
| <input checked="" type="checkbox"/> <b>Other</b>                                        |                                  |                                            |                                                |                                            |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                            |                                          |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                               | Vulnerability quotient                   |
| Metropolitan                                                                            | 1974                             | 1                                          | Brick                                          | 2,300.00                                   | 35%                                      |
| SFHA NO                                                                                 | Building value:                  | \$195,500                                  |                                                | Contents value:                            | \$97,750                                 |
|                                                                                         |                                  |                                            |                                                |                                            |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                       | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                          |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 161,288                                    |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 117,300                                    |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 234,600                                    |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                          |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 124,631                                    |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 139,294                                    |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 95,306                                     |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 234,600                                    |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                          |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 168,619                                    |                                          |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Enid City Hall    |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 401 W. Owen K. Garriot RD                      |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.390417                                      | Longitude:                              | - 97.883417                      |                                   |
| WHY CRITICAL:                                                                    |                                            |                                                |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                                |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Metropolitan                                                                     | 1920                                       | 2                                              | Masonry Concrete                        | 15,000.00                        | 70%                               |
| SFHA NO                                                                          | Building value:                            | \$1,275,000                                    |                                         | Contents value:                  | \$637,500                         |
|                                                                                  |                                            |                                                |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 1,051,875                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 765,000                          |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 1,530,000                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 812,813                          |                                   |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 908,438                          |                                   |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 621,563                          |                                   |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 1,530,000                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 1,099,688                        |                                   |

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|                                                                                         |                                  |                                     |                        |                                                            |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|------------------------|------------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                        | <b>FACILITY NAME:</b> Enid Fire Department Central Station |                        |
| <b>FACILITY LOCATION:</b> 401 W. Owen K. Garriot Rd                                     |                                  | <b>COUNTY:</b> Garfield county      |                        |                                                            |                        |
| Latitude: 36.390417                                                                     |                                  | Longitude: - 97.883417              |                        |                                                            |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                        |                                                            |                        |
| <input checked="" type="checkbox"/> Emergency Service                                   |                                  | <input type="checkbox"/> Government |                        | <input type="checkbox"/> Health Service                    |                        |
|                                                                                         |                                  | <input type="checkbox"/> Utility    |                        | <input type="checkbox"/> Resource                          |                        |
|                                                                                         |                                  |                                     |                        | <input type="checkbox"/> Other                             |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                        |                                                            |                        |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:  | Square Feet:                                               | Vulnerability quotient |
| Metropolitan                                                                            | 1920                             | 2                                   | Masonry Concrete       | 15,000.00                                                  | 70%                    |
| SFHA NO                                                                                 | Building value:                  | \$1,275,000                         |                        | Contents value:                                            | \$2,550,000            |
|                                                                                         |                                  |                                     |                        |                                                            |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b> | <b>Value of loss</b>                                       | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                  | 0.00%                  | 0                                                          |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                 | 55.00%                 | 2,103,750                                                  |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                 | 40.00%                 | 1,530,000                                                  |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                 | 80.00%                 | 3,060,000                                                  |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                  | 0.00%                  | 0                                                          |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                 | 42.50%                 | 1,625,625                                                  |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                 | 47.50%                 | 1,816,875                                                  |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                 | 32.50%                 | 1,243,125                                                  |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                 | 80.00%                 | 3,060,000                                                  |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                  | 0.00%                  | 0                                                          |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                 | 57.50%                 | 2,199,375                                                  |                        |

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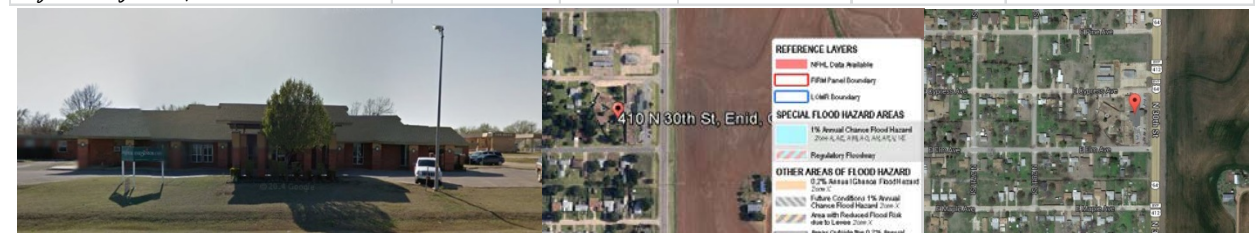


|                                                                                         |                                  |                                                       |                        |                                                           |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|------------------------|-----------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                       |                        | <b>FACILITY NAME:</b> Enid Pet Hospital                   |                        |
| <b>FACILITY LOCATION:</b> 1212 N. Van Buren St. Enid                                    |                                  | <b>COUNTY:</b> Garfield County                        |                        |                                                           |                        |
| Latitude: 36.409                                                                        |                                  | Longitude: - 97.891453                                |                        |                                                           |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                       |                        |                                                           |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input checked="" type="checkbox"/> <b>Government</b> |                        | <input checked="" type="checkbox"/> <b>Health Service</b> |                        |
| <input type="checkbox"/> <b>Utility</b>                                                 |                                  | <input type="checkbox"/> <b>Resource</b>              |                        | <input type="checkbox"/> <b>Other</b>                     |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                       |                        |                                                           |                        |
| Location:                                                                               | Year built:                      | Stories:                                              | Type of Construction:  | Square Feet:                                              | Vulnerability quotient |
| Metropolitan                                                                            | 1985                             | 1                                                     | Brick                  | 2,500.00                                                  | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$212,500                                             |                        | Contents value:                                           | \$318,750              |
|                                                                                         |                                  |                                                       |                        |                                                           |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                               | <b>Percent of loss</b> | <b>Value of loss</b>                                      | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                                    | 0.00%                  | 0                                                         |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                                   | 55.00%                 | 292,188                                                   |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                                   | 40.00%                 | 212,500                                                   |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                                   | 80.00%                 | 425,000                                                   |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                                    | 0.00%                  | 0                                                         |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                                   | 42.50%                 | 225,781                                                   |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                                   | 47.50%                 | 252,344                                                   |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                                   | 32.50%                 | 172,656                                                   |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                                   | 80.00%                 | 425,000                                                   |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                                    | 0.00%                  | 0                                                         |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                                   | 57.50%                 | 305,469                                                   |                        |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                                    | FACILITY NAME: Enid Senior Care  |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|----------------------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 410 N. 30th Street Enid             |                                                    | COUNTY:                          | Garfield County                   |
|                                                                                  |                           | Latitude:                           | 36.40039                                           | Longitude:                       | - 97.837232                       |
| WHY CRITICAL:                                                                    |                           |                                     |                                                    |                                  |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                                    |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                                    |                                  |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                              | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 1964                      | 1                                   | Brick                                              | 11,957.00                        | 35%                               |
| SFHA NO                                                                          | Building value:           | \$1,016,345                         |                                                    | Contents value:                  | \$1,524,518                       |
|                                                                                  |                           |                                     |                                                    |                                  |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                                    | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                              | 0                                |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                             | 1,397,475                        |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                             | 1,016,345                        |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                             | 2,032,690                        |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                              | 0                                |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                             | 1,079,867                        |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                             | 1,206,910                        |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                             | 825,780                          |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                             | 2,032,690                        |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                              | 0                                |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                             | 1,460,996                        |                                   |







|                                                                                         |                                  |                                     |                                                    |                                                                |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|----------------------------------------------------|----------------------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                                    | <b>FACILITY NAME:</b> Evans Pharmacy LLC and medical Equipment |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 1108 W. Willow RD                   |                                                    | <b>COUNTY:</b> Garfield County                                 |                                   |
|                                                                                         |                                  | Latitude:                           | 36.420894                                          | Longitude:                                                     | - 97.892224                       |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                                    |                                                                |                                   |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility                               | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                                    |                                                                |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                                    |                                                                |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                              | Square Feet:                                                   | Vulnerability quotient            |
| Metropolitan                                                                            | 1962                             | 1                                   | Masonry concrete                                   | 15,100.00                                                      | 60%                               |
| SFHA No                                                                                 | Building value:                  | \$1,283,500                         |                                                    | Contents value:                                                | \$855,667                         |
|                                                                                         |                                  |                                     |                                                    |                                                                |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                             | <b>Value of loss</b>                                           | <b>NOTES</b>                      |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                                              | 0                                                              |                                   |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                                             | 1,176,542                                                      |                                   |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                                             | 855,667                                                        |                                   |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                                             | 1,711,334                                                      |                                   |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                                              | 0                                                              |                                   |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                                             | 909,146                                                        |                                   |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                                             | 1,016,104                                                      |                                   |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                                             | 695,229                                                        |                                   |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                                             | 1,711,334                                                      |                                   |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                                              | 0                                                              |                                   |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                                             | 1,230,021                                                      |                                   |

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|                                                                                        |                                                       |                                     |                                         |                                               |                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                                       |                                     |                                         | <b>FACILITY NAME:</b> Enid Fire Department #4 |                                   |
| <b>FACILITY LOCATION:</b>                                                              |                                                       | 1306 N. Garland Rd                  |                                         | <b>COUNTY:</b> Garfield County                |                                   |
|                                                                                        |                                                       | Latitude:                           | 36.408651                               | Longitude:                                    | - 97.944478                       |
|                                                                                        |                                                       |                                     |                                         |                                               |                                   |
| <b>WHY CRITICAL:</b>                                                                   | <input checked="" type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility              | <input type="checkbox"/> Resource |
|                                                                                        | <input type="checkbox"/> Other                        |                                     |                                         |                                               |                                   |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                                       |                                     |                                         |                                               |                                   |
| Location:                                                                              | Year built:                                           | Stories:                            | Type of Construction:                   | Square Feet:                                  | Vulnerability quotient            |
| Urban                                                                                  | 1980                                                  | 1                                   | Brick                                   | 2,000.00                                      | 35%                               |
| SFHA NO                                                                                | Building value:                                       | \$170,000                           |                                         | Contents value:                               | \$340,000                         |
|                                                                                        |                                                       |                                     |                                         |                                               |                                   |
|                                                                                        | <b>Probability of this risk?</b>                      | <b>Degree of Impact</b>             | <b>Percent of loss</b>                  | <b>Value of loss</b>                          | <b>NOTES</b>                      |
| Dam Failure                                                                            | 0%                                                    | 0%                                  | 0.00%                                   | 0                                             |                                   |
| Drought                                                                                | 80%                                                   | 30%                                 | 55.00%                                  | 280,500                                       |                                   |
| Earthquake                                                                             | 50%                                                   | 30%                                 | 40.00%                                  | 204,000                                       |                                   |
| Extreme heat                                                                           | 90%                                                   | 70%                                 | 80.00%                                  | 408,000                                       |                                   |
| Flooding                                                                               | 0%                                                    | 0%                                  | 0.00%                                   | 0                                             |                                   |
| Hail                                                                                   | 70%                                                   | 15%                                 | 42.50%                                  | 216,750                                       |                                   |
| High winds                                                                             | 70%                                                   | 25%                                 | 47.50%                                  | 242,250                                       |                                   |
| Lightning                                                                              | 50%                                                   | 15%                                 | 32.50%                                  | 165,750                                       |                                   |
| Tornado                                                                                | 70%                                                   | 90%                                 | 80.00%                                  | 408,000                                       |                                   |
| Wildfires                                                                              | 0%                                                    | 0%                                  | 0.00%                                   | 0                                             |                                   |
| Winter storms                                                                          | 70%                                                   | 45%                                 | 57.50%                                  | 293,250                                       |                                   |
| Hazard Mitigation Specialists, LLC                                                     |                                                       |                                     |                                         |                                               |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Enid Fire Department #3 |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 2205 W. K Garriot Rd                |                                         | COUNTY:                                | Garfield County                   |
|                                                                                  |                           | Latitude:                           | 36.39055                                | Longitude:                             | - 97.905493                       |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                        |                                   |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility       | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                        |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                        |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                           | Vulnerability quotient            |
| Metropolitan                                                                     | 1980                      | 1                                   | Brick                                   | 1,800.00                               | 35%                               |
| SFHA NO                                                                          | Building value:           | \$153,000                           |                                         | Contents value:                        | \$306,000                         |
|                                                                                  |                           |                                     |                                         |                                        |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                          | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                      |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 252,450                                |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 183,600                                |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 367,200                                |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                      |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 195,075                                |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 218,025                                |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 149,175                                |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 367,200                                |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                      |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 263,925                                |                                   |

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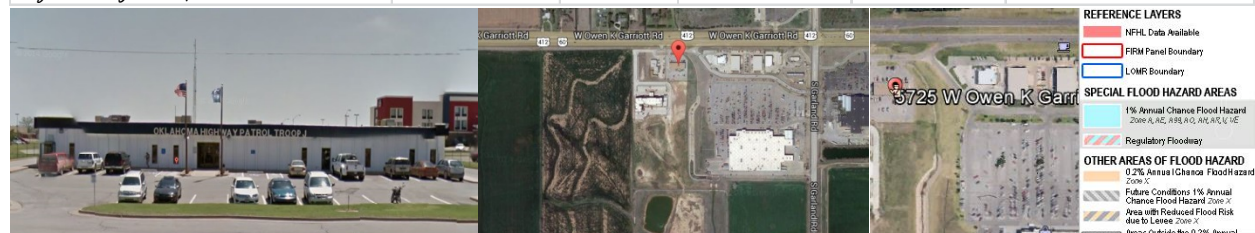


| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                                |                       | FACILITY NAME: Garfield County Courthouse |                                  |
|----------------------------------------------------------------------------------|---------------------------|------------------------------------------------|-----------------------|-------------------------------------------|----------------------------------|
| FACILITY LOCATION:                                                               |                           | 114 W. Broadway Ave                            |                       | COUNTY:                                   | Garfield County                  |
|                                                                                  |                           | Latitude:                                      | 36.39704              | Longitude:                                | - 97.879168                      |
| WHY CRITICAL:                                                                    |                           |                                                |                       |                                           |                                  |
| <input type="checkbox"/> Emergency Service                                       |                           | <input checked="" type="checkbox"/> Government |                       | <input type="checkbox"/> Health Service   | <input type="checkbox"/> Utility |
|                                                                                  |                           |                                                |                       | <input type="checkbox"/> Resource         | <input type="checkbox"/> Other   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                                |                       |                                           |                                  |
| Location:                                                                        | Year built:               | Stories:                                       | Type of Construction: | Square Feet:                              | Vulnerability quotient           |
| Metropolitan                                                                     | 1934                      | 4                                              | Masonry Concrete      | 20,220.00                                 | 70%                              |
| SFHA NO                                                                          | Building value:           | \$1,718,700                                    |                       | Contents value:                           | \$859,350                        |
|                                                                                  |                           |                                                |                       |                                           |                                  |
|                                                                                  | Probability of this risk? | Degree of Impact                               | Percent of loss       | Value of loss                             | NOTES                            |
| Dam Failure                                                                      | 0%                        | 0%                                             | 0.00%                 | 0                                         |                                  |
| Drought                                                                          | 80%                       | 30%                                            | 55.00%                | 1,417,928                                 |                                  |
| Earthquake                                                                       | 50%                       | 30%                                            | 40.00%                | 1,031,220                                 |                                  |
| Extreme heat                                                                     | 90%                       | 70%                                            | 80.00%                | 2,062,440                                 |                                  |
| Flooding                                                                         | 0%                        | 0%                                             | 0.00%                 | 0                                         |                                  |
| Hail                                                                             | 70%                       | 15%                                            | 42.50%                | 1,095,671                                 |                                  |
| High winds                                                                       | 70%                       | 25%                                            | 47.50%                | 1,224,574                                 |                                  |
| Lightning                                                                        | 50%                       | 15%                                            | 32.50%                | 837,866                                   |                                  |
| Tornado                                                                          | 70%                       | 90%                                            | 80.00%                | 2,062,440                                 |                                  |
| Wildfires                                                                        | 0%                        | 0%                                             | 0.00%                 | 0                                         |                                  |
| Winter storms                                                                    | 70%                       | 45%                                            | 57.50%                | 1,482,379                                 |                                  |



|                                                                                         |                                  |                                     |                        |                                                              |                                  |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|------------------------|--------------------------------------------------------------|----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                        | <b>FACILITY NAME:</b> Garfield County Highway Patrol troop J |                                  |
| <b>FACILITY LOCATION:</b> 5725 W. Owen K Garriet RD                                     |                                  | <b>COUNTY:</b> Garfield County      |                        |                                                              |                                  |
| Latitude: 36.390042                                                                     |                                  | Longitude: - 97.948199              |                        |                                                              |                                  |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                        |                                                              |                                  |
| <input checked="" type="checkbox"/> Emergency Service                                   |                                  | <input type="checkbox"/> Government |                        | <input type="checkbox"/> Health Service                      | <input type="checkbox"/> Utility |
|                                                                                         |                                  | <input type="checkbox"/> Resource   |                        | <input type="checkbox"/> Other                               |                                  |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                        |                                                              |                                  |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:  | Square Feet:                                                 | Vulnerability quotient           |
| Urban                                                                                   | 1964                             | 1                                   | Masonry Concrete       | 3,780.00                                                     | 35%                              |
| SFHA NO                                                                                 | Building value:                  | \$321,300                           |                        | Contents value:                                              | \$642,600                        |
|                                                                                         |                                  |                                     |                        |                                                              |                                  |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b> | <b>Value of loss</b>                                         | <b>NOTES</b>                     |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                  | 0                                                            |                                  |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                 | 530,145                                                      |                                  |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                 | 385,560                                                      |                                  |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                 | 771,120                                                      |                                  |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                  | 0                                                            |                                  |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                 | 409,658                                                      |                                  |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                 | 457,853                                                      |                                  |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                 | 313,268                                                      |                                  |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                 | 771,120                                                      |                                  |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                  | 0                                                            |                                  |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                 | 554,243                                                      |                                  |

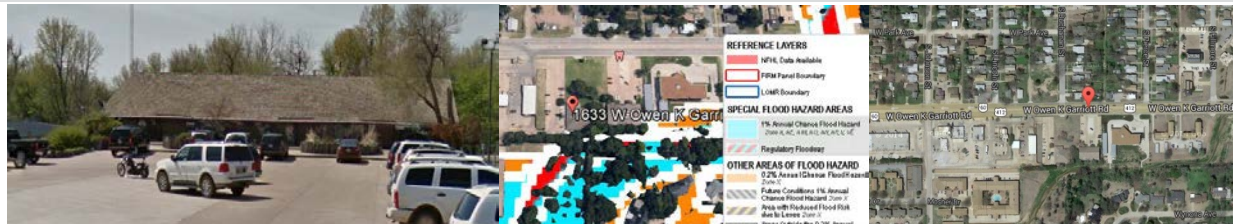
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| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                                    | FACILITY NAME: Grieshober Dental |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|----------------------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 1633 W. Owen K. Garriot Rd<br>Enid  |                                                    | COUNTY:                          | Garfield County                   |
|                                                                                  |                           | Latitude:                           | 36.390215                                          | Longitude:                       | - 97.898515                       |
| WHY CRITICAL:                                                                    |                           |                                     |                                                    |                                  |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                                    |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                                    |                                  |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                              | Square Feet:                     | Vulnerability quotient            |
| Metropolitan                                                                     | 1980                      | 1                                   | Brick                                              | 3,591.00                         | 35%                               |
| SFHA Yes                                                                         | Building value:           | \$305,235                           |                                                    | Contents value:                  | \$610,470                         |
|                                                                                  |                           |                                     |                                                    |                                  |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                                    | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                              | 0                                |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                             | 503,638                          |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                             | 366,282                          |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                             | 732,564                          |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                              | 0                                |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                             | 389,175                          |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                             | 434,960                          |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                             | 297,604                          |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                             | 732,564                          |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                              | 0                                |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                             | 526,530                          |                                   |

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|                                                                                         |                                  |                                            |                                                           |                                                                    |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                           | <b>FACILITY NAME:</b> <b>Integris Heart and Vascular Institute</b> |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 605 West State Ave                         |                                                           | <b>COUNTY:</b> Garfield County                                     |                                          |
|                                                                                         |                                  | Latitude:                                  | 36.389247                                                 | Longitude:                                                         | - 97.885781                              |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                           |                                                                    |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input checked="" type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                            | <input type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                   |                                  |                                            |                                                           |                                                                    |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                           |                                                                    |                                          |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                                     | Square Feet:                                                       | Vulnerability quotient                   |
| <b>Metropolitan</b>                                                                     | 1980                             | 2                                          | Masonry Concrete                                          | 16,000.00                                                          | 35%                                      |
| SFHA No                                                                                 | Building value:                  | \$1,360,000                                |                                                           | Contents value:                                                    | \$2,040,000                              |
|                                                                                         |                                  |                                            |                                                           |                                                                    |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                                    | <b>Value of loss</b>                                               | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                                     | 0                                                                  |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                                    | 1,870,000                                                          |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                                    | 1,360,000                                                          |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                                    | 2,720,000                                                          |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                                     | 0                                                                  |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                                    | 1,445,000                                                          |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                                    | 1,615,000                                                          |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                                    | 1,105,000                                                          |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                                    | 2,720,000                                                          |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                                     | 0                                                                  |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                                    | 1,955,000                                                          |                                          |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                                    | FACILITY NAME:                      |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           |                                     |                                                    | Integris Bass Baptist Health Center |                                   |
| 600 S. Monroe St.                                                                |                           |                                     |                                                    | COUNTY:                             | Garfield County                   |
| Latitude:                                                                        |                           | 36.389954                           | Longitude:                                         |                                     | - 97.88782                        |
| WHY CRITICAL:                                                                    |                           |                                     |                                                    |                                     |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                                    |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                                    |                                     |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                              | Square Feet:                        | Vulnerability quotient            |
| Metropolitan                                                                     | 1970                      | 2                                   | Masonry Concrete                                   | 26,000.00                           | 35%                               |
| SFHA NO                                                                          | Building value:           | \$2,210,000                         |                                                    | Contents value:                     | \$4,420,000                       |
|                                                                                  |                           |                                     |                                                    |                                     |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                                    | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                              | 0                                   |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                             | 3,646,500                           |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                             | 2,652,000                           |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                             | 5,304,000                           |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                              | 0                                   |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                             | 2,817,750                           |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                             | 3,149,250                           |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                             | 2,154,750                           |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                             | 5,304,000                           |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                              | 0                                   |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                             | 3,812,250                           |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                                                    |                                     |                                   |







| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Mc Donalds        |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 1010 W. Maine St. Enid                    |                                         | COUNTY: Garfield County          |                                   |
|                                                                                  |                           | Latitude:                                 | 36.395875                               | Longitude:                       | - 97.890635                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                  |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                  |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Metropolitan                                                                     | 1990                      | 1                                         | Masonry Concrete                        | 2,300.00                         | 20%                               |
| SFHA No                                                                          | Building value:           | \$195,500                                 |                                         | Contents value:                  | \$97,750                          |
|                                                                                  |                           |                                           |                                         |                                  |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 161,288                          |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 117,300                          |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 234,600                          |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 124,631                          |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 139,294                          |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 95,306                           |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 234,600                          |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 168,619                          |                                   |

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|                                                                                         |                                  |                                     |                        |                                                       |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|------------------------|-------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                        | <b>FACILITY NAME:</b> Medical Plaza/Enid Heart Clinic |                        |
| <b>FACILITY LOCATION:</b> 620 South Madison Street                                      |                                  | <b>COUNTY:</b> Garfield County      |                        |                                                       |                        |
| Latitude: 36.390085                                                                     |                                  | Longitude: - 97.886227              |                        |                                                       |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                        |                                                       |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government |                        | <input checked="" type="checkbox"/> Health Service    |                        |
| <input type="checkbox"/> Utility                                                        |                                  | <input type="checkbox"/> Resource   |                        | <input type="checkbox"/> Other                        |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                        |                                                       |                        |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:  | Square Feet:                                          | Vulnerability quotient |
| Metropolitan                                                                            | 1962                             | 4                                   | Masonry Concrete       | 23,560.00                                             | 60%                    |
| SFHA No                                                                                 | Building value:                  | \$2,002,600                         |                        | Contents value:                                       | \$3,003,900            |
|                                                                                         |                                  |                                     |                        |                                                       |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b> | <b>Value of loss</b>                                  | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                  | 0.00%                  | 0                                                     |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                 | 55.00%                 | 2,753,575                                             |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                 | 40.00%                 | 2,002,600                                             |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                 | 80.00%                 | 4,005,200                                             |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                  | 0.00%                  | 0                                                     |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                 | 42.50%                 | 2,127,763                                             |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                 | 47.50%                 | 2,378,088                                             |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                 | 32.50%                 | 1,627,113                                             |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                 | 80.00%                 | 4,005,200                                             |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                  | 0.00%                  | 0                                                     |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                 | 57.50%                 | 2,878,738                                             |                        |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                       | FACILITY NAME:                          |                        |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------|-----------------------------------------|------------------------|
| FACILITY LOCATION: 301 W. Owen K. Garriot RD                                     |                           |                                     |                       | COUNTY: Garfield County                 |                        |
| Latitude: 36.390594                                                              |                           | Longitude: - 97.882515              |                       |                                         |                        |
| WHY CRITICAL:                                                                    |                           |                                     |                       |                                         |                        |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government |                       | <input type="checkbox"/> Health Service |                        |
| <input type="checkbox"/> Utility                                                 |                           | <input type="checkbox"/> Resource   |                       | <input type="checkbox"/> Other          |                        |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                       |                                         |                        |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction: | Square Feet:                            | Vulnerability quotient |
| Metropolitan                                                                     | 1970                      | 1                                   | Brick                 | 13,500.00                               | 35%                    |
| SFHA NO                                                                          | Building value:           | \$1,147,500                         |                       | Contents value:                         | \$2,295,000            |
|                                                                                  |                           |                                     |                       |                                         |                        |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss       | Value of loss                           | NOTES                  |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                 | 0                                       |                        |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                | 1,893,375                               |                        |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                | 1,377,000                               |                        |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                | 2,754,000                               |                        |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                 | 0                                       |                        |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                | 1,463,063                               |                        |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                | 1,635,188                               |                        |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                | 1,118,813                               |                        |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                | 2,754,000                               |                        |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                 | 0                                       |                        |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                | 1,979,438                               |                        |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                       |                                         |                        |

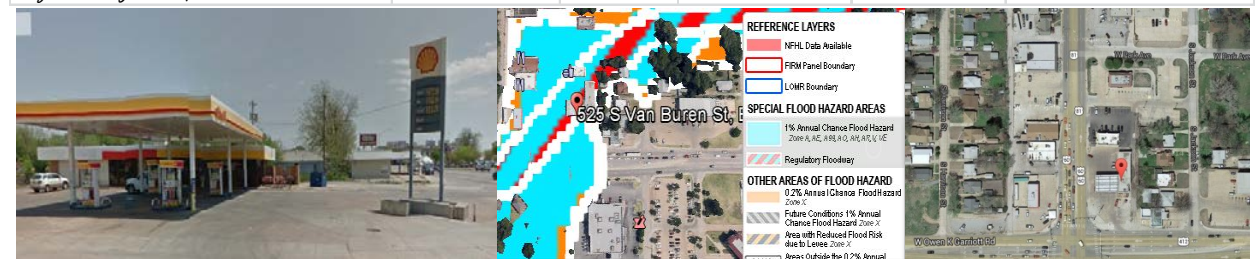


|                                                                                         |                                  |                                     |                                                    |                                                  |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|----------------------------------------------------|--------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                                    | <b>FACILITY NAME:</b> Scheffes Prescription Shop |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 127 E. Randolph Ave                 |                                                    | <b>COUNTY:</b> Garfield County                   |                                   |
|                                                                                         |                                  | Latitude:                           | 36.397617                                          | Longitude:                                       | - 97.876954                       |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                                    |                                                  |                                   |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility                 | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                                    |                                                  |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                                    |                                                  |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                              | Square Feet:                                     | Vulnerability quotient            |
| Metropolitan                                                                            | 1964                             | 1                                   | Brick/Metal                                        | 5,600.00                                         | 35%                               |
| SFHA NO                                                                                 | Building value:                  | \$476,000                           |                                                    | Contents value:                                  | \$238,000                         |
|                                                                                         |                                  |                                     |                                                    |                                                  |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                             | <b>Value of loss</b>                             | <b>NOTES</b>                      |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                  | 0.00%                                              | 0                                                |                                   |
| <b>Drought</b>                                                                          | 80%                              | 39%                                 | 59.50%                                             | 424,830                                          |                                   |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                 | 40.00%                                             | 285,600                                          |                                   |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                 | 80.00%                                             | 571,200                                          |                                   |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                  | 0.00%                                              | 0                                                |                                   |
| <b>Hail</b>                                                                             | 70%                              | 15%                                 | 42.50%                                             | 303,450                                          |                                   |
| <b>High winds</b>                                                                       | 70%                              | 25%                                 | 47.50%                                             | 339,150                                          |                                   |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                 | 32.50%                                             | 232,050                                          |                                   |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                 | 80.00%                                             | 571,200                                          |                                   |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                  | 0.00%                                              | 0                                                |                                   |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                 | 57.50%                                             | 410,550                                          |                                   |





| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Shell Fueling Station        |                                              |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 525 S. Van Buren St. Enid           |                                         | COUNTY:                                     | Garfield County                              |
|                                                                                  | Latitude:                                  | 36.391355                           | Longitude:                              | - 97.889703                                 |                                              |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input checked="" type="checkbox"/> Utility | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                                            |                                     |                                         |                                             |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                             |                                              |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                                | Vulnerability quotient                       |
| Metropolitan                                                                     | 1195                                       | 1                                   | masonry concrete                        | 3,213.00                                    | 20%                                          |
| SFHA Yes                                                                         | Building value:                            | \$273,105                           |                                         | Contents value:                             | \$182,070                                    |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                               | NOTES                                        |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 250,346                                     |                                              |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 182,070                                     |                                              |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 364,140                                     |                                              |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 193,449                                     |                                              |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 216,208                                     |                                              |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 147,932                                     |                                              |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 364,140                                     |                                              |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 261,726                                     |                                              |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Subway            |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 2402 W. Owen K. Garriot Rd<br>Enid  |                                         | COUNTY:                          |                                   |
|                                                                                  |                           | Latitude:                           | 36.391227                               | Longitude:                       | - 97.908112                       |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                  |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
| <input checked="" type="checkbox"/> Other                                        |                           |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Metropolitan                                                                     | 1990                      | 1                                   | Masonry concrete                        | 1,469.00                         | 20%                               |
| SFHA NO                                                                          | Building value:           | \$127,160                           |                                         | Contents value:                  | \$42,386                          |
|                                                                                  |                           |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 93,250                           |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 67,818                           |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 135,637                          |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 72,057                           |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 80,534                           |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 55,102                           |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 135,637                          |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 97,489                           |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                                         |                                  |                                   |



|                                                                                         |                                  |                                     |                                                    |                                                                      |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|----------------------------------------------------|----------------------------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                                    | <b>FACILITY NAME:</b> The Commons United Methodist Care Facility and |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 3706 King Street Enid Oklahoma      |                                                    | <b>COUNTY:</b> Garfield County                                       |                                   |
|                                                                                         |                                  | Latitude:                           | 36.393729                                          | Longitude:                                                           | - 97.924957                       |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                                    |                                                                      |                                   |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility                                     | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                                    |                                                                      |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                                    |                                                                      |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                              | Square Feet:                                                         | Vulnerability quotient            |
| Metropolitan                                                                            | 1962                             | 1 and 2                             | Brick/Mansonry Concrete                            | 85,236.00                                                            | 60%                               |
| SFHA NO                                                                                 | Building value:                  | \$7,245,060                         |                                                    | Contents value:                                                      | \$14,490,120                      |
|                                                                                         |                                  |                                     |                                                    |                                                                      |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                             | <b>Value of loss</b>                                                 | <b>NOTES</b>                      |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                                              | 0                                                                    |                                   |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                                             | 11,954,349                                                           |                                   |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                                             | 8,694,072                                                            |                                   |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                                             | 17,388,144                                                           |                                   |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                                              | 0                                                                    |                                   |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                                             | 9,237,452                                                            |                                   |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                                             | 10,324,211                                                           |                                   |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                                             | 7,063,934                                                            |                                   |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                                             | 17,388,144                                                           |                                   |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                                              | 0                                                                    |                                   |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                                             | 12,497,729                                                           |                                   |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                                    | FACILITY NAME: Walgreens Pharmacy |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|----------------------------------------------------|-----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 929 W. Owen K. Garriot RD           |                                                    | COUNTY:                           | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.390317                           | Longitude:                                         | - 97.889515                       |                                   |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility  | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                                            |                                     |                                                    |                                   |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                                    |                                   |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                              | Square Feet:                      | Vulnerability quotient            |
| Metropolitan                                                                     | 1194                                       | 1                                   | Brick                                              | 6,750.00                          | 20%                               |
| SFHA No                                                                          | Building value:                            | \$573,750                           |                                                    | Contents value:                   | \$286,875                         |
|                                                                                  |                                            |                                     |                                                    |                                   |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                                    | Value of loss                     | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                              | 0                                 |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                             | 473,344                           |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                             | 344,250                           |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                             | 688,500                           |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                              | 0                                 |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                             | 365,766                           |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                             | 408,797                           |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                             | 279,703                           |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                             | 688,500                           |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                              | 0                                 |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                             | 494,859                           |                                   |

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|                                                                                         |                                  |                                            |                        |                                                  |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|--------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Wal-Mart                   |                        |
| <b>FACILITY LOCATION:</b> 5505 W. Owen K. Garriot RD                                    |                                  | <b>COUNTY:</b> Garfield County             |                        |                                                  |                        |
| Latitude: 36.387788                                                                     |                                  | Longitude: - 97.945603                     |                        |                                                  |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                  |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>   |                        |
| <input type="checkbox"/> <b>Utility</b>                                                 |                                  | <input type="checkbox"/> <b>Resource</b>   |                        | <input checked="" type="checkbox"/> <b>Other</b> |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                  |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                     | Vulnerability quotient |
| Urban                                                                                   | 1980                             | 1                                          | Masonry concrete       | 93,000.00                                        | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$7,905,000                                |                        | Contents value:                                  | \$3,952,500            |
|                                                                                         |                                  |                                            |                        |                                                  |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                             | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                                |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 6,521,625                                        |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30-%                                       | 40.00%                 | 4,743,000                                        |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 9,486,000                                        |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                                |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 5,039,438                                        |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 5,632,313                                        |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 3,853,688                                        |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 9,486,000                                        |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                                |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 6,818,063                                        |                        |

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|                                                                                         |                                                |                                         |                                  |                                            |                                |
|-----------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------|----------------------------------|--------------------------------------------|--------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                                |                                         |                                  | <b>FACILITY NAME:</b> Fairmont City Office |                                |
| <b>FACILITY LOCATION:</b> 618 Main Street Fairmont Ok                                   |                                                | <b>COUNTY:</b> Garfield County          |                                  |                                            |                                |
| Latitude: 36.355905                                                                     |                                                | Longitude: - 97.706813                  |                                  |                                            |                                |
| <b>WHY CRITICAL:</b>                                                                    |                                                |                                         |                                  |                                            |                                |
| <input type="checkbox"/> Emergency Service                                              | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource          | <input type="checkbox"/> Other |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                                |                                         |                                  |                                            |                                |
| Location:                                                                               | Year built:                                    | Stories:                                | Type of Construction:            | Square Feet:                               | Vulnerability quotient         |
| rural                                                                                   | 1974                                           | 1                                       | Metal                            | 783.00                                     | 40%                            |
| SFHA NO                                                                                 | Building value:                                | \$50,895                                |                                  | Contents value:                            | \$25,448                       |
|                                                                                         |                                                |                                         |                                  |                                            |                                |
|                                                                                         | <b>Probability of this risk?</b>               | <b>Degree of Impact</b>                 | <b>Percent of loss</b>           | <b>Value of loss</b>                       | <b>NOTES</b>                   |
| Dam Failure                                                                             | 0%                                             | 0%                                      | 0.00%                            | 0                                          |                                |
| Drought                                                                                 | 80%                                            | 30%                                     | 55.00%                           | 41,989                                     |                                |
| Earthquake                                                                              | 50%                                            | 30%                                     | 40.00%                           | 30,537                                     |                                |
| Extreme heat                                                                            | 90%                                            | 70%                                     | 80.00%                           | 61,074                                     |                                |
| Flooding                                                                                | 0%                                             | 0%                                      | 0.00%                            | 0                                          |                                |
| Hail                                                                                    | 70%                                            | 15%                                     | 42.50%                           | 32,446                                     |                                |
| High winds                                                                              | 70%                                            | 25%                                     | 47.50%                           | 36,263                                     |                                |
| Lightning                                                                               | 50%                                            | 15%                                     | 32.50%                           | 24,811                                     |                                |
| Tornado                                                                                 | 70%                                            | 90%                                     | 80.00%                           | 61,074                                     |                                |
| Wildfires                                                                               | 0%                                             | 0%                                      | 0.00%                            | 0                                          |                                |
| Winter storms                                                                           | 70%                                            | 45%                                     | 57.50%                           | 43,897                                     |                                |

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|                                                                                         |                                  |                                     |                                         |                                                |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                         | <b>FACILITY NAME:</b> Fairmont Fire Department |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 123 W. Enid Street                  |                                         | <b>COUNTY:</b> Garfield County                 |                                   |
|                                                                                         |                                  | Latitude:                           | 36.356132                               | Longitude:                                     | - 97.706824                       |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                         |                                                |                                   |
| <input checked="" type="checkbox"/> Emergency Service                                   |                                  | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility               | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                         |                                                |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                         |                                                |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                   | Square Feet:                                   | Vulnerability quotient            |
| Rural                                                                                   | 1974                             | 1                                   | Metal                                   | 2,200.00                                       | 40%                               |
| SFHA NO                                                                                 | Building value:                  | \$143,000                           |                                         | Contents value:                                | \$286,000                         |
|                                                                                         |                                  |                                     |                                         |                                                |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                  | <b>Value of loss</b>                           | <b>NOTES</b>                      |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                                   | 0                                              |                                   |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                                  | 235,950                                        |                                   |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                                  | 171,600                                        |                                   |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                                  | 343,200                                        |                                   |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                                   | 0                                              |                                   |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                                  | 182,325                                        |                                   |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                                  | 203,775                                        |                                   |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                                  | 139,425                                        |                                   |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                                  | 343,200                                        |                                   |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                                   | 0                                              |                                   |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                                  | 246,675                                        |                                   |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Fairmont Post Office |                                                                  |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|-------------------------------------|------------------------------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 620 Main street                                |                                         | COUNTY:                             | Garfield County                                                  |
|                                                                                  | Latitude:                                  | 36.355595                                      | Longitude:                              | - 97.706738                         |                                                                  |
| WHY CRITICAL:                                                                    |                                            |                                                |                                         |                                     |                                                                  |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource <input type="checkbox"/> Other |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                     |                                                                  |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                        | Vulnerability quotient                                           |
| Rural                                                                            | 1974                                       | 1                                              | Masonry Concrete                        | 390.00                              | 35%                                                              |
| SFHA NO                                                                          | Building value:                            | \$33,150                                       |                                         | Contents value:                     | \$22,100                                                         |
|                                                                                  |                                            |                                                |                                         |                                     |                                                                  |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                       | NOTES                                                            |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                   |                                                                  |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 30,388                              |                                                                  |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 22,100                              |                                                                  |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 44,200                              |                                                                  |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                   |                                                                  |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 23,481                              |                                                                  |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 26,244                              |                                                                  |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 17,956                              |                                                                  |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 44,200                              |                                                                  |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                   |                                                                  |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 31,769                              |                                                                  |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Steinert Veterinary Clinic   |                                              |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 10302 Breckenridge Road<br>Fairmont |                                         | COUNTY:                                     | Grady County                                 |
|                                                                                  |                                            | Latitude:                           | 36.434382                               | Longitude:                                  | - 97.727311                                  |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input checked="" type="checkbox"/> Utility | <input checked="" type="checkbox"/> Resource |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                             |                                              |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                                | Vulnerability quotient                       |
| Rural                                                                            | 1980                                       | 1                                   | Metal                                   | 3,800.00                                    | 40%                                          |
| SFHA NO                                                                          | Building value:                            | \$247,000                           |                                         | Contents value:                             | \$370,500                                    |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                               | NOTES                                        |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 339,625                                     |                                              |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 247,000                                     |                                              |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 494,000                                     |                                              |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 262,438                                     |                                              |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 293,313                                     |                                              |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 200,688                                     |                                              |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 494,000                                     |                                              |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 355,063                                     |                                              |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                         |                                             |                                              |





|                                                                                        |                                  |                                                  |                                                |                                                          |                                          |
|----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------------------------------|----------------------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                  |                                                  |                                                | <b>FACILITY NAME:</b> Zion Lutheran Church and preschool |                                          |
| <b>FACILITY LOCATION:</b>                                                              |                                  | 507 Fairmont Road                                |                                                | <b>COUNTY:</b> Garfield County                           |                                          |
|                                                                                        |                                  | Latitude:                                        | 36.35665                                       | Longitude:                                               | - 97.710695                              |
| <b>WHY CRITICAL:</b>                                                                   |                                  |                                                  |                                                |                                                          |                                          |
| <input type="checkbox"/> Emergency Service                                             |                                  | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                  | <input type="checkbox"/> <b>Resource</b> |
|                                                                                        |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                                          |                                          |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                                                |                                                          |                                          |
| Location:                                                                              | Year built:                      | Stories:                                         | Type of Construction:                          | Square Feet:                                             | Vulnerability quotient                   |
| Rural                                                                                  | 1964                             | 1                                                | Brick                                          | 8,055.00                                                 | 35%                                      |
| SFHA NO                                                                                | Building value:                  | \$684,675                                        |                                                | Contents value:                                          | \$342,338                                |
|                                                                                        |                                  |                                                  |                                                |                                                          |                                          |
|                                                                                        | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b>                         | <b>Value of loss</b>                                     | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                     | 0%                               | 0%                                               | 0.00%                                          | 0                                                        |                                          |
| <b>Drought</b>                                                                         | 80%                              | 30%                                              | 55.00%                                         | 564,857                                                  |                                          |
| <b>Earthquake</b>                                                                      | 50%                              | 30%                                              | 40.00%                                         | 410,805                                                  |                                          |
| <b>Extreme heat</b>                                                                    | 90%                              | 70%                                              | 80.00%                                         | 821,610                                                  |                                          |
| <b>Flooding</b>                                                                        | 0%                               | 0%                                               | 0.00%                                          | 0                                                        |                                          |
| <b>Hail</b>                                                                            | 70%                              | 15%                                              | 42.50%                                         | 436,481                                                  |                                          |
| <b>High winds</b>                                                                      | 70%                              | 25%                                              | 47.50%                                         | 487,831                                                  |                                          |
| <b>Lightning</b>                                                                       | 50%                              | 15%                                              | 32.50%                                         | 333,779                                                  |                                          |
| <b>Tornado</b>                                                                         | 70%                              | 90%                                              | 80.00%                                         | 821,610                                                  |                                          |
| <b>Wildfires</b>                                                                       | 0%                               | 0%                                               | 0.00%                                          | 0                                                        |                                          |
| <b>Winter storms</b>                                                                   | 70%                              | 45%                                              | 57.50%                                         | 590,532                                                  |                                          |
| Hazard Mitigation Specialists, LLC                                                     |                                  |                                                  |                                                |                                                          |                                          |



|                                                                                         |                                  |                                                  |                                                |                                           |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------------------------------|-------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                  |                                                | <b>FACILITY NAME:</b> Duggar Funeral Home |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 315 E Garber Rd                                  |                                                | <b>COUNTY:</b> Garfield County            |                                          |
|                                                                                         |                                  | Latitude:                                        | 36.433105                                      | Longitude:                                | -97.57965                                |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                  |                                                |                                           |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>   | <input type="checkbox"/> <b>Resource</b> |
|                                                                                         |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                           |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                                                |                                           |                                          |
| Location:                                                                               | Year built:                      | Stories:                                         | Type of Construction:                          | Square Feet:                              | Vulnerability quotient                   |
| Rural                                                                                   | 1920                             | 3                                                | Brick                                          | 22,000.00                                 | 60%                                      |
| SFHA No                                                                                 | Building value:                  | \$1,870,000                                      |                                                | Contents value:                           | \$1,246,667                              |
|                                                                                         |                                  |                                                  |                                                |                                           |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b>                         | <b>Value of loss</b>                      | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                               | 0.00%                                          | 0                                         |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                              | 55.00%                                         | 1,714,167                                 |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                              | 40.00%                                         | 1,246,667                                 |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                              | 80.00%                                         | 2,493,334                                 |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                               | 0.00%                                          | 0                                         |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                              | 42.50%                                         | 1,324,583                                 |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                              | 47.50%                                         | 1,480,417                                 |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                              | 32.50%                                         | 1,012,917                                 |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                              | 80.00%                                         | 2,493,334                                 |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                               | 0.00%                                          | 0                                         |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                              | 57.50%                                         | 1,792,084                                 |                                          |



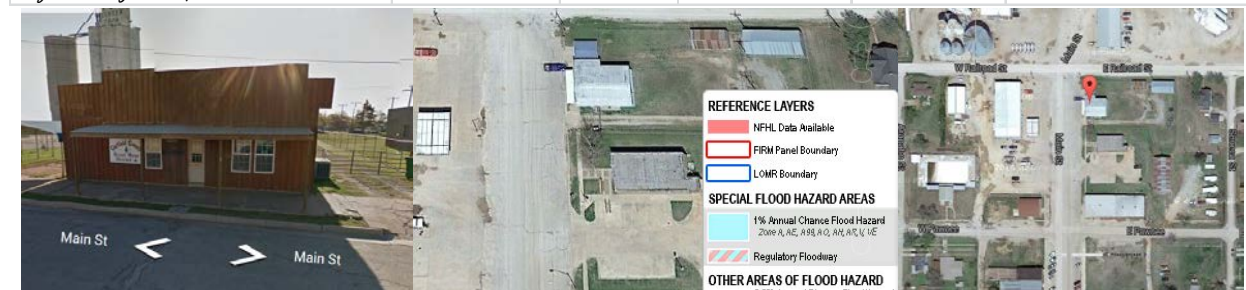
| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: ABC Bank          |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 129 W. Osage                        |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.438162                           | Longitude:                              | -97.582893                       |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Rural                                                                            | 1974                                       | 1                                   | Brick                                   | 1,017.00                         | 35%                               |
| SFHA No                                                                          | Building value:                            | \$86,445                            |                                         | Contents value:                  | \$172,890                         |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 142,634                          |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 103,734                          |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 207,468                          |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 110,217                          |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 123,184                          |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 84,284                           |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 207,468                          |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 149,118                          |                                   |







| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME:                              |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           |                                     |                                         | Garfield County Rural Water Department      |                                   |
| 202 Main Street                                                                  |                           |                                     |                                         | COUNTY:                                     | Garfield County                   |
| Latitude:                                                                        |                           | 36.439842                           | Longitude:                              |                                             | -97.582394                        |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                             |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input checked="" type="checkbox"/> Utility | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                             |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                             |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                                | Vulnerability quotient            |
| Rural                                                                            | 1985                      | 1                                   | Wood                                    | 1,163.00                                    | 30%                               |
| SFHA NO                                                                          | Building value:           | \$87,225                            |                                         | Contents value:                             | \$43,612                          |
|                                                                                  |                           |                                     |                                         |                                             |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                               | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                           |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 71,960                                      |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 52,335                                      |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 104,670                                     |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                           |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 55,606                                      |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 62,148                                      |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 42,522                                      |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 104,670                                     |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                           |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 75,231                                      |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                                |                       | FACILITY NAME: Garber City Hall         |                                  |
|----------------------------------------------------------------------------------|---------------------------|------------------------------------------------|-----------------------|-----------------------------------------|----------------------------------|
| FACILITY LOCATION:                                                               |                           | 437 Main Street                                |                       | COUNTY: Garfield County                 |                                  |
|                                                                                  |                           | Latitude:                                      | 36.437201             | Longitude:                              | -97.582962                       |
| WHY CRITICAL:                                                                    |                           |                                                |                       |                                         |                                  |
| <input type="checkbox"/> Emergency Service                                       |                           | <input checked="" type="checkbox"/> Government |                       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility |
|                                                                                  |                           |                                                |                       | <input type="checkbox"/> Resource       | <input type="checkbox"/> Other   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                                |                       |                                         |                                  |
| Location:                                                                        | Year built:               | Stories:                                       | Type of Construction: | Square Feet:                            | Vulnerability quotient           |
| Rural                                                                            | 1920                      | 2                                              | Brick                 | 16,000.00                               | 60%                              |
| SFHA NO                                                                          | Building value:           | \$1,360,000                                    |                       | Contents value:                         | \$544,000                        |
|                                                                                  |                           |                                                |                       |                                         |                                  |
|                                                                                  | Probability of this risk? | Degree of Impact                               | Percent of loss       | Value of loss                           | NOTES                            |
| Dam Failure                                                                      | 0%                        | 0%                                             | 0.00%                 | 0                                       |                                  |
| Drought                                                                          | 80%                       | 30%                                            | 55.00%                | 1,047,200                               |                                  |
| Earthquake                                                                       | 50%                       | 30%                                            | 40.00%                | 761,600                                 |                                  |
| Extreme heat                                                                     | 90%                       | 70%                                            | 80.00%                | 1,523,200                               |                                  |
| Flooding                                                                         | 0%                        | 0%                                             | 0.00%                 | 0                                       |                                  |
| Hail                                                                             | 70%                       | 15%                                            | 42.50%                | 809,200                                 |                                  |
| High winds                                                                       | 70%                       | 25%                                            | 47.50%                | 904,400                                 |                                  |
| Lightning                                                                        | 50%                       | 15%                                            | 32.50%                | 618,800                                 |                                  |
| Tornado                                                                          | 70%                       | 90%                                            | 80.00%                | 1,523,200                               |                                  |
| Wildfires                                                                        | 0%                        | 0%                                             | 0.00%                 | 0                                       |                                  |
| Winter storms                                                                    | 70%                       | 45%                                            | 57.50%                | 1,094,800                               |                                  |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                                    | FACILITY NAME: Garber Family Medical Clinic |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|----------------------------------------------------|---------------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 316 Main Street                     |                                                    | COUNTY:                                     | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.438476                           | Longitude:                                         | -97.582382                                  |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                                    |                                             |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility            | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other             |                                     |                                                    |                                             |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                                    |                                             |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                              | Square Feet:                                | Vulnerability quotient            |
| rural                                                                            | 1930                                       | 1                                   | Brick/Metal                                        | 700.00                                      | 60%                               |
| SFHA NO                                                                          | Building value:                            | \$59,500                            |                                                    | Contents value:                             | \$39,660                          |
|                                                                                  |                                            |                                     |                                                    |                                             |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                                    | Value of loss                               | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                              | 0                                           |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                             | 54,538                                      |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                             | 39,664                                      |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                             | 79,328                                      |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                              | 0                                           |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                             | 42,143                                      |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                             | 47,101                                      |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                             | 32,227                                      |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                             | 79,328                                      |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                              | 0                                           |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                             | 57,017                                      |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                                    |                                             |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                      |                                         | FACILITY NAME: Garber Fire Department |                                   |
|----------------------------------------------------------------------------------|---------------------------|--------------------------------------|-----------------------------------------|---------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | SR-74 and Breckenridge Rd.<br>Garber |                                         | COUNTY:                               | Garfield County                   |
|                                                                                  |                           | Latitude:                            | 36.43397                                | Longitude:                            | -97.5867                          |
| WHY CRITICAL:                                                                    |                           |                                      |                                         |                                       |                                   |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government  | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility      | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                      |                                         |                                       |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                      |                                         |                                       |                                   |
| Location:                                                                        | Year built:               | Stories:                             | Type of Construction:                   | Square Feet:                          | Vulnerability quotient            |
| Rural                                                                            | 2005                      | 1                                    | Metal                                   | 4,000.00                              | 15%                               |
| SFHA NO                                                                          | Building value:           | \$240,500                            |                                         | Contents value:                       | \$481,000                         |
|                                                                                  |                           |                                      |                                         |                                       |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                     | Percent of loss                         | Value of loss                         | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                   | 0.00%                                   | 0                                     |                                   |
| Drought                                                                          | 80%                       | 30%                                  | 55.00%                                  | 396,825                               |                                   |
| Earthquake                                                                       | 50%                       | 30%                                  | 40.00%                                  | 288,600                               |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                  | 80.00%                                  | 577,200                               |                                   |
| Flooding                                                                         | 0%                        | 0%                                   | 0.00%                                   | 0                                     |                                   |
| Hail                                                                             | 70%                       | 15%                                  | 42.50%                                  | 306,638                               |                                   |
| High winds                                                                       | 70%                       | 25%                                  | 47.50%                                  | 342,713                               |                                   |
| Lightning                                                                        | 50%                       | 15%                                  | 32.50%                                  | 234,488                               |                                   |
| Tornado                                                                          | 70%                       | 90%                                  | 80.00%                                  | 577,200                               |                                   |
| Wildfires                                                                        | 0%                        | 0%                                   | 0.00%                                   | 0                                     |                                   |
| Winter storms                                                                    | 70%                       | 45%                                  | 57.50%                                  | 414,863                               |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                      |                                         |                                       |                                   |



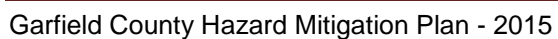
| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: First Baptist Church         |                                              |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 315 E. Garber Rd                    |                                         | COUNTY:                                     | Garfield County                              |
|                                                                                  | Latitude:                                  | 36.433105                           | Longitude:                              | -97.57965                                   |                                              |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input checked="" type="checkbox"/> Utility | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                                            |                                     |                                         |                                             |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                             |                                              |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                                | Vulnerability quotient                       |
| Rural                                                                            | 1974                                       | 1                                   | Brick                                   | 7,737.00                                    | 35%                                          |
| SFHA No                                                                          | Building value:                            | \$657,645                           |                                         | Contents value:                             | \$328,823                                    |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                               | NOTES                                        |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 542,557                                     |                                              |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 394,587                                     |                                              |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 789,174                                     |                                              |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 419,249                                     |                                              |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 468,572                                     |                                              |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 320,602                                     |                                              |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 789,174                                     |                                              |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 567,219                                     |                                              |





|                                                                                        |                                                       |                                     |                                         |                                    |                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|-----------------------------------------|------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                                       |                                     |                                         | <b>FACILITY NAME:</b> Garfield EMS |                                   |
| <b>FACILITY LOCATION:</b>                                                              |                                                       | 513 Main Street                     |                                         | <b>COUNTY:</b>                     |                                   |
|                                                                                        |                                                       | Latitude:                           | 36.436556                               | Longitude:                         | -97.582293                        |
|                                                                                        |                                                       |                                     |                                         |                                    |                                   |
| <b>WHY CRITICAL:</b>                                                                   | <input checked="" type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility   | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                         |                                                       |                                     |                                         |                                    |                                   |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                                       |                                     |                                         |                                    |                                   |
| Location:                                                                              | Year built:                                           | Stories:                            | Type of Construction:                   | Square Feet:                       | Vulnerability quotient            |
| Rural                                                                                  | 1994                                                  | 1                                   | Metal                                   | 1,540.00                           | 15%                               |
| SFHA No                                                                                | Building value:                                       | \$100,100                           |                                         | Contents value:                    | \$60,000                          |
|                                                                                        |                                                       |                                     |                                         |                                    |                                   |
|                                                                                        | <b>Probability of this risk?</b>                      | <b>Degree of Impact</b>             | <b>Percent of loss</b>                  | <b>Value of loss</b>               | <b>NOTES</b>                      |
| <b>Dam Failure</b>                                                                     | 0%                                                    | 0%                                  | 0.00%                                   | 0                                  |                                   |
| <b>Drought</b>                                                                         | 80%                                                   | 30%                                 | 55.00%                                  | 88,055                             |                                   |
| <b>Earthquake</b>                                                                      | 50%                                                   | 30%                                 | 40.00%                                  | 64,040                             |                                   |
| <b>Extreme heat</b>                                                                    | 90%                                                   | 70%                                 | 80.00%                                  | 128,080                            |                                   |
| <b>Flooding</b>                                                                        | 0%                                                    | 0%                                  | 0.00%                                   | 0                                  |                                   |
| <b>Hail</b>                                                                            | 70%                                                   | 15%                                 | 42.50%                                  | 68,043                             |                                   |
| <b>High winds</b>                                                                      | 70%                                                   | 25%                                 | 47.50%                                  | 76,048                             |                                   |
| <b>Lightning</b>                                                                       | 50%                                                   | 15%                                 | 32.50%                                  | 52,033                             |                                   |
| <b>Tornado</b>                                                                         | 70%                                                   | 90%                                 | 80.00%                                  | 128,080                            |                                   |
| <b>Wildfires</b>                                                                       | 0%                                                    | 0%                                  | 0.00%                                   | 0                                  |                                   |
| <b>Winter storms</b>                                                                   | 70%                                                   | 45%                                 | 57.50%                                  | 92,058                             |                                   |
| Hazard Mitigation Specialists, LLC                                                     |                                                       |                                     |                                         |                                    |                                   |



Hazard Mitigation Specialists, LLC

|                                                                                         |                                  |                                            |                        |                                                     |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|-----------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Jiffy Trip                    |                        |
| <b>FACILITY LOCATION:</b> SR-74 and Breckinridge Rd.                                    |                                  | <b>COUNTY:</b> Garfield County             |                        |                                                     |                        |
| Latitude: 36.4333                                                                       |                                  | Longitude: -97.58607                       |                        |                                                     |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                     |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>      |                        |
|                                                                                         |                                  | <input type="checkbox"/> <b>Utility</b>    |                        | <input checked="" type="checkbox"/> <b>Resource</b> |                        |
|                                                                                         |                                  |                                            |                        | <input type="checkbox"/> <b>Other</b>               |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                     |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                        | Vulnerability quotient |
| rural                                                                                   | 1980                             | 1                                          | Masonry/concrete       | 1,180.00                                            | 35%                    |
| SFHA NO                                                                                 | Building value:                  | \$100,300                                  |                        | Contents value:                                     | \$50,150               |
|                                                                                         |                                  |                                            |                        |                                                     |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                                | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                                   |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 82,748                                              |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 60,180                                              |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 120,360                                             |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                                   |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 63,941                                              |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 71,464                                              |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 48,896                                              |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 120,360                                             |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                                   |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 86,509                                              |                        |
| Hazard Mitigation Specialists, LLC                                                      |                                  |                                            |                        |                                                     |                        |





|                                                                                        |                                  |                                            |                                                |                                                  |                                                     |
|----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                  |                                            |                                                | <b>FACILITY NAME:</b> Methodist Church of Garber |                                                     |
| <b>FACILITY LOCATION:</b>                                                              |                                  | 110 Main Street                            |                                                | <b>COUNTY:</b> Garfield County                   |                                                     |
|                                                                                        |                                  | Latitude:                                  | 36.434064                                      | Longitude:                                       | -97.582322                                          |
| <b>WHY CRITICAL:</b>                                                                   |                                  |                                            |                                                |                                                  |                                                     |
| <input type="checkbox"/> Emergency Service                                             |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>          | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                  |                                  |                                            |                                                |                                                  |                                                     |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                  |                                                     |
| Location:                                                                              | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                     | Vulnerability quotient                              |
| Rural                                                                                  | 1974                             | 1                                          | Metal                                          | 4,000.00                                         | 40%                                                 |
| SFHA NO                                                                                | Building value:                  | \$260,000                                  |                                                | Contents value:                                  | \$130,000                                           |
|                                                                                        |                                  |                                            |                                                |                                                  |                                                     |
|                                                                                        | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                             | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                     | 0%                               | 0%                                         | 0.00%                                          | 0                                                |                                                     |
| <b>Drought</b>                                                                         | 80%                              | 30%                                        | 55.00%                                         | 214,500                                          |                                                     |
| <b>Earthquake</b>                                                                      | 50%                              | 30%                                        | 40.00%                                         | 156,000                                          |                                                     |
| <b>Extreme heat</b>                                                                    | 90%                              | 70%                                        | 80.00%                                         | 312,000                                          |                                                     |
| <b>Flooding</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                                |                                                     |
| <b>Hail</b>                                                                            | 70%                              | 15%                                        | 42.50%                                         | 165,750                                          |                                                     |
| <b>High winds</b>                                                                      | 70%                              | 25%                                        | 47.50%                                         | 185,250                                          |                                                     |
| <b>Lightning</b>                                                                       | 50%                              | 15%                                        | 32.50%                                         | 126,750                                          |                                                     |
| <b>Tornado</b>                                                                         | 70%                              | 90%                                        | 80.00%                                         | 312,000                                          |                                                     |
| <b>Wildfires</b>                                                                       | 0%                               | 0%                                         | 0.00%                                          | 0                                                |                                                     |
| <b>Winter storms</b>                                                                   | 70%                              | 45%                                        | 57.50%                                         | 224,250                                          |                                                     |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Garber Police Station |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 437 Main Street                     |                                         | COUNTY:                              | Garfield County                   |
|                                                                                  |                           | Latitude:                           | 36.437201                               | Longitude:                           | -97.582962                        |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                      |                                   |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility     | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                      |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                      |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                         | Vulnerability quotient            |
| rural                                                                            | 1920                      | 2                                   | Brick                                   | 16,000.00                            | 60%                               |
| SFHA NO                                                                          | Building value:           | \$1,360,000                         |                                         | Contents value:                      | \$544,000                         |
|                                                                                  |                           |                                     |                                         |                                      |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                        | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                    |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 1,047,200                            |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 761,600                              |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 1,523,200                            |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                    |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 809,200                              |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 904,400                              |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 618,800                              |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 1,523,200                            |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                    |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 1,094,800                            |                                   |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Hunter City Hall  |                                                                  |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|----------------------------------|------------------------------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 625 Cherokee St.                               |                                         | COUNTY:                          | Garfield County                                                  |
|                                                                                  | Latitude:                                  | 36.563495                                      | Longitude:                              | -97.666037                       |                                                                  |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource <input type="checkbox"/> Other |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                  |                                                                  |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                     | Vulnerability quotient                                           |
| Rural                                                                            | 1974                                       | 1                                              | Brick                                   | 9,000.00                         | 35%                                                              |
| SFHA NO                                                                          | Building value:                            | \$765,000                                      |                                         | Contents value:                  | \$1,530,000                                                      |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                    | NOTES                                                            |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                                                  |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 1,262,250                        |                                                                  |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 918,000                          |                                                                  |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 1,836,000                        |                                                                  |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                                                  |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 975,375                          |                                                                  |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 1,090,125                        |                                                                  |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 745,875                          |                                                                  |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 1,836,000                        |                                                                  |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                |                                                                  |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 1,319,625                        |                                                                  |

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|                                         |                                                             |                                            |                                                |                                               |                                                     |
|-----------------------------------------|-------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b> |                                                             |                                            |                                                | <b>FACILITY NAME:</b> Hunter Community Center |                                                     |
| <b>FACILITY LOCATION:</b>               | 622 Cherokee St                                             |                                            | <b>COUNTY:</b>                                 | Garfield County                               |                                                     |
|                                         | Latitude:                                                   | 36.563641                                  | Longitude:                                     | -97.660981                                    |                                                     |
| <b>WHY CRITICAL:</b>                    | <input type="checkbox"/> Emergency Service                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>       | <input checked="" type="checkbox"/> <b>Resource</b> |
|                                         | <input type="checkbox"/> <b>Other</b>                       |                                            |                                                |                                               |                                                     |
| <b>ABOUT THE STRUCTURE</b>              | Vulnerability due to location, age and type of construction |                                            |                                                |                                               |                                                     |
| Location:                               | Year built:                                                 | Stories:                                   | Type of Construction:                          | Square Feet:                                  | Vulnerability quotient                              |
| Rural                                   | 1974                                                        | 1                                          | Brick                                          | 1,000.00                                      | 35%                                                 |
| SFHA NO                                 | Building value:                                             | \$85,000                                   |                                                | Contents value:                               | \$42,500                                            |
|                                         |                                                             |                                            |                                                |                                               |                                                     |
|                                         | <b>Probability of this risk?</b>                            | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                          | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                      | 0%                                                          | 0%                                         | 0.00%                                          | 0                                             |                                                     |
| <b>Drought</b>                          | 80%                                                         | 30%                                        | 55.00%                                         | 70,125                                        |                                                     |
| <b>Earthquake</b>                       | 50%                                                         | 30%                                        | 40.00%                                         | 51,000                                        |                                                     |
| <b>Extreme heat</b>                     | 90%                                                         | 70%                                        | 80.00%                                         | 102,000                                       |                                                     |
| <b>Flooding</b>                         | 0%                                                          | 0%                                         | 0.00%                                          | 0                                             |                                                     |
| <b>Hail</b>                             | 70%                                                         | 15%                                        | 42.50%                                         | 54,188                                        |                                                     |
| <b>High winds</b>                       | 70%                                                         | 25%                                        | 47.50%                                         | 60,563                                        |                                                     |
| <b>Lightning</b>                        | 50%                                                         | 15%                                        | 32.50%                                         | 41,438                                        |                                                     |
| <b>Tornado</b>                          | 70%                                                         | 90%                                        | 80.00%                                         | 102,000                                       |                                                     |
| <b>Wildfires</b>                        | 0%                                                          | 0%                                         | 0.00%                                          | 0                                             |                                                     |
| <b>Winter storms</b>                    | 70%                                                         | 45%                                        | 57.50%                                         | 73,313                                        |                                                     |

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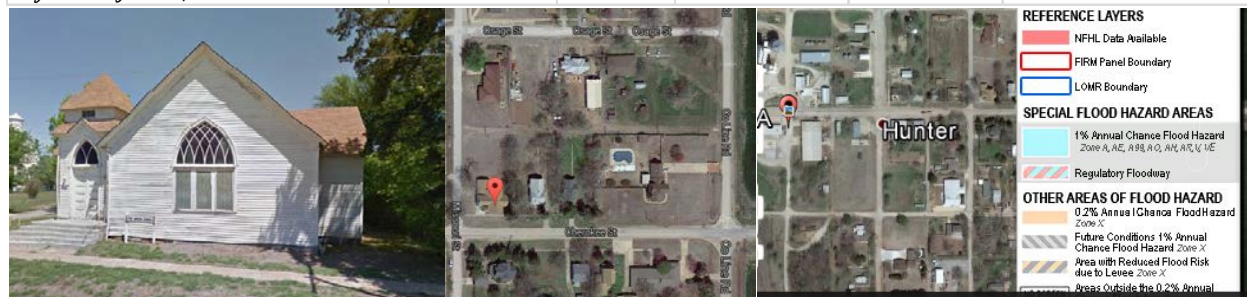
|                                                                                         |                                  |                                     |                                         |                                           |                                   |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                     |                                         | <b>FACILITY NAME:</b> Hunter Fire Station |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 625 Cherokee St.                    |                                         | <b>COUNTY:</b> Garfield County            |                                   |
|                                                                                         |                                  | Latitude:                           | 36.56337                                | Longitude:                                | -97.666476                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                     |                                         |                                           |                                   |
| <input checked="" type="checkbox"/> Emergency Service                                   |                                  | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility          | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                          |                                  |                                     |                                         |                                           |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                     |                                         |                                           |                                   |
| Location:                                                                               | Year built:                      | Stories:                            | Type of Construction:                   | Square Feet:                              | Vulnerability quotient            |
| Rural                                                                                   | 1974                             | 1                                   | Metal                                   | 7,051.00                                  | 40%                               |
| SFHA No                                                                                 | Building value:                  | \$458,315                           |                                         | Contents value:                           | \$916,630                         |
|                                                                                         |                                  |                                     |                                         |                                           |                                   |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>             | <b>Percent of loss</b>                  | <b>Value of loss</b>                      | <b>NOTES</b>                      |
| Dam Failure                                                                             | 0%                               | 0%                                  | 0.00%                                   | 0                                         |                                   |
| Drought                                                                                 | 80%                              | 30%                                 | 55.00%                                  | 756,220                                   |                                   |
| Earthquake                                                                              | 50%                              | 30%                                 | 40.00%                                  | 549,978                                   |                                   |
| Extreme heat                                                                            | 90%                              | 70%                                 | 80.00%                                  | 1,099,956                                 |                                   |
| Flooding                                                                                | 0%                               | 0%                                  | 0.00%                                   | 0                                         |                                   |
| Hail                                                                                    | 70%                              | 15%                                 | 42.50%                                  | 584,352                                   |                                   |
| High winds                                                                              | 70%                              | 25%                                 | 47.50%                                  | 653,099                                   |                                   |
| Lightning                                                                               | 50%                              | 15%                                 | 32.50%                                  | 446,857                                   |                                   |
| Tornado                                                                                 | 70%                              | 90%                                 | 80.00%                                  | 1,099,956                                 |                                   |
| Wildfires                                                                               | 0%                               | 0%                                  | 0.00%                                   | 0                                         |                                   |
| Winter storms                                                                           | 70%                              | 45%                                 | 57.50%                                  | 790,593                                   |                                   |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Hunter First Baptist Church  |                                              |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 2002 East Cherokee St.              |                                         | COUNTY:                                     | Garfield County                              |
|                                                                                  | Latitude:                                  | 36.563935                           | Longitude:                              | -97.659664                                  |                                              |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input checked="" type="checkbox"/> Utility | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                                            |                                     |                                         |                                             |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                             |                                              |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                                | Vulnerability quotient                       |
| Rural                                                                            | 1950                                       | 1                                   | Brick                                   | 1,600.00                                    | 50%                                          |
| SFHA NO                                                                          | Building value:                            | \$136,000                           |                                         | Contents value:                             | \$68,000                                     |
|                                                                                  |                                            |                                     |                                         |                                             |                                              |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                               | NOTES                                        |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 112,200                                     |                                              |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 81,600                                      |                                              |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 163,200                                     |                                              |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 86,700                                      |                                              |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 96,900                                      |                                              |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 66,300                                      |                                              |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 163,200                                     |                                              |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                           |                                              |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 117,300                                     |                                              |

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| CRITICAL FACILITY IDENTIFICATION                                                                                                                                                                                                                  |                           |                          |                             | FACILITY NAME: Hunter Fueling Station |                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------|-----------------------------|---------------------------------------|-----------------------------|
| FACILITY LOCATION: Texas Street Hunter Oklahoma                                                                                                                                                                                                   |                           |                          | COUNTY: Garfield County     |                                       |                             |
| Latitude: 36.563567                                                                                                                                                                                                                               |                           | Longitude: -97.662672    |                             |                                       |                             |
| WHY CRITICAL: <input type="checkbox"/> Emergency Service <input type="checkbox"/> Government <input type="checkbox"/> Health Service <input type="checkbox"/> Utility <input checked="" type="checkbox"/> Resource <input type="checkbox"/> Other |                           |                          |                             |                                       |                             |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction                                                                                                                                                                  |                           |                          |                             |                                       |                             |
| Location: Rural                                                                                                                                                                                                                                   | Year built: 1980          | Stories: 1               | Type of Construction: Brick | Square Feet: 1,337.00                 | Vulnerability quotient: 35% |
| SFHA No                                                                                                                                                                                                                                           | Building value: \$133,645 | Contents value: \$56,823 |                             |                                       |                             |
|                                                                                                                                                                                                                                                   | Probability of this risk? | Degree of Impact         | Percent of loss             | Value of loss                         | NOTES                       |
| Dam Failure                                                                                                                                                                                                                                       | 0%                        | 0%                       | 0.00%                       | 0                                     |                             |
| Drought                                                                                                                                                                                                                                           | 80%                       | 30%                      | 55.00%                      | 104,757                               |                             |
| Earthquake                                                                                                                                                                                                                                        | 50%                       | 30%                      | 40.00%                      | 76,187                                |                             |
| Extreme heat                                                                                                                                                                                                                                      | 90%                       | 70%                      | 80.00%                      | 152,374                               |                             |
| Flooding                                                                                                                                                                                                                                          | 0%                        | 0%                       | 0.00%                       | 0                                     |                             |
| Hail                                                                                                                                                                                                                                              | 70%                       | 15%                      | 42.50%                      | 80,949                                |                             |
| High winds                                                                                                                                                                                                                                        | 70%                       | 25%                      | 47.50%                      | 90,472                                |                             |
| Lightning                                                                                                                                                                                                                                         | 50%                       | 15%                      | 32.50%                      | 61,902                                |                             |
| Tornado                                                                                                                                                                                                                                           | 70%                       | 90%                      | 80.00%                      | 152,374                               |                             |
| Wildfires                                                                                                                                                                                                                                         | 0%                        | 0%                       | 0.00%                       | 0                                     |                             |
| Winter storms                                                                                                                                                                                                                                     | 70%                       | 45%                      | 57.50%                      | 109,519                               |                             |
| Hazard Mitigation Specialists, LLC                                                                                                                                                                                                                |                           |                          |                             |                                       |                             |



|                                                                                         |                                  |                                                       |                        |                                                |                                         |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|------------------------|------------------------------------------------|-----------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                       |                        | <b>FACILITY NAME:</b> Hunter Post office       |                                         |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 203 Main street                                       |                        | <b>COUNTY:</b> Garfield County                 |                                         |
|                                                                                         |                                  | Latitude:                                             | 36.564712              | Longitude:                                     | -97.661414                              |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                       |                        |                                                |                                         |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input checked="" type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b> |
|                                                                                         |                                  |                                                       |                        | <input type="checkbox"/> <b>Resource</b>       | <input type="checkbox"/> <b>Other</b>   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                       |                        |                                                |                                         |
| Location:                                                                               | Year built:                      | Stories:                                              | Type of Construction:  | Square Feet:                                   | Vulnerability quotient                  |
| Rural                                                                                   | 1974                             | 1                                                     | Brick                  | 761.00                                         | 35%                                     |
| SFHA NO                                                                                 | Building value:                  | \$64,685                                              |                        | Contents value:                                | \$43,124                                |
|                                                                                         |                                  |                                                       |                        |                                                |                                         |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                               | <b>Percent of loss</b> | <b>Value of loss</b>                           | <b>NOTES</b>                            |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                                    | 0.00%                  | 0                                              |                                         |
| <b>Drought</b>                                                                          | 80%                              | 30%                                                   | 55.00%                 | 59,295                                         |                                         |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                                   | 40.00%                 | 43,124                                         |                                         |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                                   | 80.00%                 | 86,247                                         |                                         |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                                    | 0.00%                  | 0                                              |                                         |
| <b>Hail</b>                                                                             | 70%                              | 15%                                                   | 42.50%                 | 45,819                                         |                                         |
| <b>High winds</b>                                                                       | 70%                              | 25%                                                   | 47.50%                 | 51,209                                         |                                         |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                                   | 32.50%                 | 35,038                                         |                                         |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                                   | 80.00%                 | 86,247                                         |                                         |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                                    | 0.00%                  | 0                                              |                                         |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                                   | 57.50%                 | 61,990                                         |                                         |
| Hazard Mitigation Specialists, LLC                                                      |                                  |                                                       |                        |                                                |                                         |



|                                                                                         |                           |                                            |                                                |                                               |                                                     |
|-----------------------------------------------------------------------------------------|---------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                           |                                            |                                                | <b>FACILITY NAME:</b> Hunter United Methodist |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                           | 121 Osage St                               |                                                | <b>COUNTY:</b> Garfield County                |                                                     |
|                                                                                         |                           | Latitude:                                  | 36.565182                                      | Longitude:                                    | -97.659657                                          |
| <b>WHY CRITICAL:</b>                                                                    |                           |                                            |                                                |                                               |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                           | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>       | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                   |                           |                                            |                                                |                                               |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                           |                                            |                                                |                                               |                                                     |
| Location:                                                                               | Year built:               | Stories:                                   | Type of Construction:                          | Square Feet:                                  | Vulnerability quotient                              |
| Rural                                                                                   | 1980                      | 1                                          | Brick                                          | 1,673.00                                      | 35%                                                 |
| SFHA NO                                                                                 | Building value:           | \$142,205                                  |                                                | Contents value:                               | \$71,103                                            |
|                                                                                         |                           |                                            |                                                |                                               |                                                     |
|                                                                                         | Probability of this risk? | Degree of Impact                           | Percent of loss                                | Value of loss                                 | NOTES                                               |
| Dam Failure                                                                             | 0%                        | 0%                                         | 0.00%                                          | 0                                             |                                                     |
| Drought                                                                                 | 80%                       | 30%                                        | 55.00%                                         | 117,319                                       |                                                     |
| Earthquake                                                                              | 50%                       | 30%                                        | 40.00%                                         | 85,323                                        |                                                     |
| Extreme heat                                                                            | 90%                       | 70%                                        | 80.00%                                         | 170,646                                       |                                                     |
| Flooding                                                                                | 0%                        | 0%                                         | 0.00%                                          | 0                                             |                                                     |
| Hail                                                                                    | 70%                       | 15%                                        | 42.50%                                         | 90,656                                        |                                                     |
| High winds                                                                              | 70%                       | 25%                                        | 47.50%                                         | 101,321                                       |                                                     |
| Lightning                                                                               | 50%                       | 15%                                        | 32.50%                                         | 69,325                                        |                                                     |
| Tornado                                                                                 | 70%                       | 90%                                        | 80.00%                                         | 170,646                                       |                                                     |
| Wildfires                                                                               | 0%                        | 0%                                         | 0.00%                                          | 0                                             |                                                     |
| Winter storms                                                                           | 70%                       | 45%                                        | 57.50%                                         | 122,652                                       |                                                     |

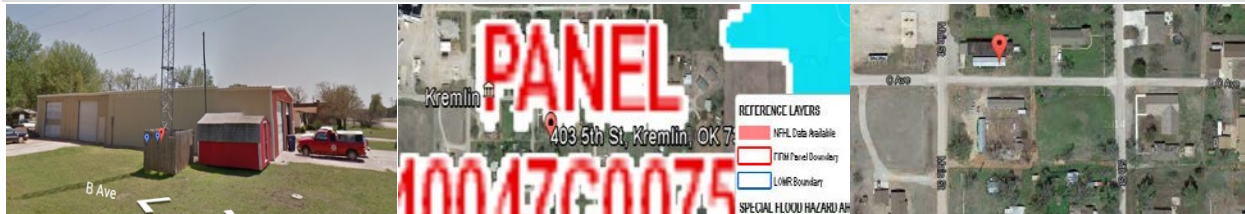
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|                                                                                         |                                  |                                                       |                        |                                                       |                                  |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|------------------------|-------------------------------------------------------|----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                       |                        | <b>FACILITY NAME:</b> Kremlin City Office (town hall) |                                  |
| <b>FACILITY LOCATION:</b> 301 Main street Kremlin Ok                                    |                                  | <b>COUNTY:</b> Garfield County                        |                        |                                                       |                                  |
| Latitude: 36.54254                                                                      |                                  | Longitude: -97.831446                                 |                        |                                                       |                                  |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                       |                        |                                                       |                                  |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input checked="" type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> Health Service               | <input type="checkbox"/> Utility |
|                                                                                         |                                  |                                                       |                        | <input type="checkbox"/> Resource                     | <input type="checkbox"/> Other   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                       |                        |                                                       |                                  |
| Location:                                                                               | Year built:                      | Stories:                                              | Type of Construction:  | Square Feet:                                          | Vulnerability quotient           |
| Rural                                                                                   | 1980                             | 1                                                     | Metal                  | 613.00                                                | 40%                              |
| SFHA No                                                                                 | Building value:                  | \$36,780                                              |                        | Contents value:                                       | \$10,000                         |
|                                                                                         |                                  |                                                       |                        |                                                       |                                  |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                               | <b>Percent of loss</b> | <b>Value of loss</b>                                  | <b>NOTES</b>                     |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                                    | 0.00%                  | 0                                                     |                                  |
| <b>Drought</b>                                                                          | 80%                              | 30%                                                   | 55.00%                 | 25,729                                                |                                  |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                                   | 40.00%                 | 18,712                                                |                                  |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                                   | 80.00%                 | 37,424                                                |                                  |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                                    | 0.00%                  | 0                                                     |                                  |
| <b>Hail</b>                                                                             | 70%                              | 15%                                                   | 42.50%                 | 19,882                                                |                                  |
| <b>High winds</b>                                                                       | 70%                              | 25%                                                   | 47.50%                 | 22,221                                                |                                  |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                                   | 32.50%                 | 15,204                                                |                                  |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                                   | 80.00%                 | 37,424                                                |                                  |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                                    | 0.00%                  | 0                                                     |                                  |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                                   | 57.50%                 | 26,899                                                |                                  |

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|                                                                                         |                                  |                                            |                                                |                                                                 |                                                     |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Kremlin Community United Methodist church |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 403 5th Street                             |                                                | <b>COUNTY:</b> Garfield                                         |                                                     |
|                                                                                         |                                  | Latitude:                                  | 36.547014                                      | Longitude:                                                      | -97.83032                                           |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                                                 |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                         | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                   |                                  |                                            |                                                |                                                                 |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                                 |                                                     |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                                    | Vulnerability quotient                              |
| Rural                                                                                   | 1962                             | 1                                          | Brick                                          | 2,700.00                                                        | 50%                                                 |
| SFHA No                                                                                 | Building value:                  | \$229,500                                  |                                                | Contents value:                                                 | \$114,750                                           |
|                                                                                         |                                  |                                            |                                                |                                                                 |                                                     |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                                            | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                                               |                                                     |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 189,338                                                         |                                                     |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 137,700                                                         |                                                     |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 275,400                                                         |                                                     |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                                               |                                                     |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 146,306                                                         |                                                     |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 163,519                                                         |                                                     |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 111,881                                                         |                                                     |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 275,400                                                         |                                                     |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                                               |                                                     |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 197,944                                                         |                                                     |

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|                                                                                         |                                  |                                            |                        |                                                        |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|--------------------------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Kremlin welding and fabrications |                        |
| <b>FACILITY LOCATION:</b> 303 Main Street Kremlin OK                                    |                                  | <b>COUNTY:</b> Garfield                    |                        |                                                        |                        |
| Latitude: 36.547254                                                                     |                                  | Longitude: -97.831446                      |                        |                                                        |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                        |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>         |                        |
|                                                                                         |                                  | <input type="checkbox"/> <b>Utility</b>    |                        | <input checked="" type="checkbox"/> <b>Resource</b>    |                        |
|                                                                                         |                                  |                                            |                        | <input type="checkbox"/> <b>Other</b>                  |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                        |                        |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                           | Vulnerability quotient |
| Rural                                                                                   | 1974                             | 1                                          | Metal                  | 2,116.00                                               | 40%                    |
| SFHA NO                                                                                 | Building value:                  | \$137,540                                  |                        | Contents value:                                        | \$68,770               |
|                                                                                         |                                  |                                            |                        |                                                        |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                                   | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                                      |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 113,471                                                |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 82,524                                                 |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 165,048                                                |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                                      |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 87,682                                                 |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 97,997                                                 |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 67,051                                                 |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 165,048                                                |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                                      |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 118,628                                                |                        |

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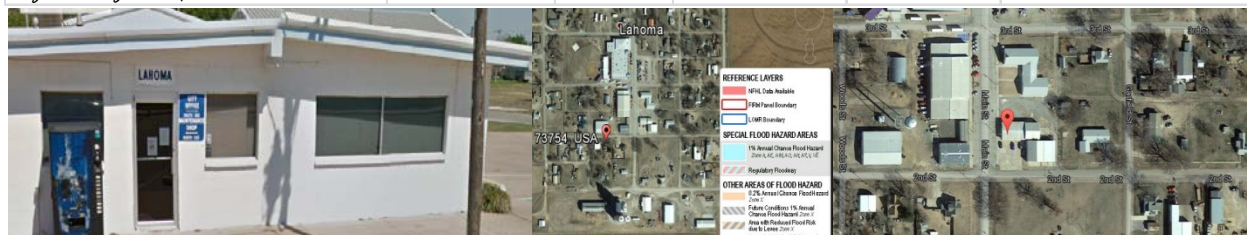


| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Cenex Gas Station |                                              |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|----------------------------------|----------------------------------------------|
| FACILITY LOCATION:                                                               |                           | 231 Lahoma RD Lahoma                |                                         | COUNTY: Garfield County          |                                              |
|                                                                                  |                           | Latitude:                           | 36.390416                               | Longitude:                       | - 98.087196                                  |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                  |                                              |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input checked="" type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                  |                                              |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                  |                                              |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient                       |
| Rural                                                                            | 1980                      | 1                                   | Metal                                   | 2,500.00                         | 40%                                          |
| SFHA NO                                                                          | Building value:           | \$162,500                           |                                         | Contents value:                  | \$108,334                                    |
|                                                                                  |                           |                                     |                                         |                                  |                                              |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                                        |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                |                                              |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 148,959                          |                                              |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 108,334                          |                                              |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 216,667                          |                                              |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                |                                              |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 115,104                          |                                              |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 128,646                          |                                              |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 88,021                           |                                              |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 216,667                          |                                              |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                |                                              |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 155,730                          |                                              |
| Hazard Mitigation Specialists, LLC                                               |                           |                                     |                                         |                                  |                                              |



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                                |                                         | FACILITY NAME: Lahoma City Office |                                                                  |
|----------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|-----------------------------------|------------------------------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 121 Main St. Lahoma                            |                                         | COUNTY:                           | Garfield County                                                  |
|                                                                                  | Latitude:                                  | 36.385679                                      | Longitude:                              | - 98.089169                       |                                                                  |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input checked="" type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility  | <input type="checkbox"/> Resource <input type="checkbox"/> Other |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                                |                                         |                                   |                                                                  |
| Location:                                                                        | Year built:                                | Stories:                                       | Type of Construction:                   | Square Feet:                      | Vulnerability quotient                                           |
| Rural                                                                            | 1974                                       | 1                                              | Masonry Concrete                        | 3,596.00                          | 35%                                                              |
| SFHA NO                                                                          | Building value:                            | \$305,660                                      |                                         | Contents value:                   | \$152,830                                                        |
|                                                                                  | Probability of this risk?                  | Degree of Impact                               | Percent of loss                         | Value of loss                     | NOTES                                                            |
| Dam Failure                                                                      | 0%                                         | 0%                                             | 0.00%                                   | 0                                 |                                                                  |
| Drought                                                                          | 80%                                        | 30%                                            | 55.00%                                  | 252,170                           |                                                                  |
| Earthquake                                                                       | 50%                                        | 30%                                            | 40.00%                                  | 183,396                           |                                                                  |
| Extreme heat                                                                     | 90%                                        | 70%                                            | 80.00%                                  | 366,792                           |                                                                  |
| Flooding                                                                         | 0%                                         | 0%                                             | 0.00%                                   | 0                                 |                                                                  |
| Hail                                                                             | 70%                                        | 15%                                            | 42.50%                                  | 194,858                           |                                                                  |
| High winds                                                                       | 70%                                        | 25%                                            | 47.50%                                  | 217,783                           |                                                                  |
| Lightning                                                                        | 50%                                        | 15%                                            | 32.50%                                  | 149,009                           |                                                                  |
| Tornado                                                                          | 70%                                        | 90%                                            | 80.00%                                  | 366,792                           |                                                                  |
| Wildfires                                                                        | 0%                                         | 0%                                             | 0.00%                                   | 0                                 |                                                                  |
| Winter storms                                                                    | 70%                                        | 45%                                            | 57.50%                                  | 263,632                           |                                                                  |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                                                       |                                     |                                         | FACILITY NAME: Lahoma Fire Department |                                   |
|----------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------|-----------------------------------------|---------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                                       | 115 2nd Street Lahoma               |                                         | COUNTY:                               | Garfield County                   |
|                                                                                  | Latitude:                                             | 36.385523                           | Longitude:                              | - 98.089593                           |                                   |
| WHY CRITICAL:                                                                    |                                                       |                                     |                                         |                                       |                                   |
|                                                                                  | <input checked="" type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility      | <input type="checkbox"/> Resource |
|                                                                                  | <input type="checkbox"/> Other                        |                                     |                                         |                                       |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                                       |                                     |                                         |                                       |                                   |
| Location:                                                                        | Year built:                                           | Stories:                            | Type of Construction:                   | Square Feet:                          | Vulnerability quotient            |
| Rural                                                                            | 1980                                                  | 1                                   | Metal                                   | 1,800.00                              | 40%                               |
| SFHA NO                                                                          | Building value:                                       | \$117,000                           |                                         | Contents value:                       | \$234,000                         |
|                                                                                  |                                                       |                                     |                                         |                                       |                                   |
|                                                                                  | Probability of this risk?                             | Degree of Impact                    | Percent of loss                         | Value of loss                         | NOTES                             |
| Dam Failure                                                                      | 0%                                                    | 0%                                  | 0.00%                                   | 0                                     |                                   |
| Drought                                                                          | 80%                                                   | 30%                                 | 55.00%                                  | 193,050                               |                                   |
| Earthquake                                                                       | 50%                                                   | 30%                                 | 40.00%                                  | 140,400                               |                                   |
| Extreme heat                                                                     | 90%                                                   | 70%                                 | 80.00%                                  | 280,800                               |                                   |
| Flooding                                                                         | 0%                                                    | 0%                                  | 0.00%                                   | 0                                     |                                   |
| Hail                                                                             | 70%                                                   | 15%                                 | 42.50%                                  | 149,175                               |                                   |
| High winds                                                                       | 70%                                                   | 25%                                 | 47.50%                                  | 166,725                               |                                   |
| Lightning                                                                        | 50%                                                   | 15%                                 | 32.50%                                  | 114,075                               |                                   |
| Tornado                                                                          | 70%                                                   | 90%                                 | 80.00%                                  | 280,800                               |                                   |
| Wildfires                                                                        | 0%                                                    | 0%                                  | 0.00%                                   | 0                                     |                                   |
| Winter storms                                                                    | 70%                                                   | 45%                                 | 57.50%                                  | 201,825                               |                                   |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Lahoma Baptist Church |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|--------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 201 Lahoma RD Lahoma                      |                                         | COUNTY:                              | Garfield County                   |
|                                                                                  | Latitude:                 | 36.390194                                 | Longitude:                              | - 98.090283                          |                                   |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                      |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility     | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                      |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                      |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                         | Vulnerability quotient            |
| Rural                                                                            | 1980                      | 1                                         | Metal                                   | 3,191.00                             | 40%                               |
| SFHA Yes                                                                         | Building value:           | \$207,415                                 |                                         | Contents value:                      | \$103,706                         |
|                                                                                  |                           |                                           |                                         |                                      |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                        | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                    |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 171,117                              |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 124,448                              |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 248,897                              |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                    |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 132,226                              |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 147,782                              |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 101,114                              |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 248,897                              |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                    |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 178,895                              |                                   |

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| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                     |                                         | FACILITY NAME: Lahoma Police Department |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 213 2nd Street Lahoma               |                                         | COUNTY:                                 | Garfield County                   |
|                                                                                  |                           | Latitude:                           | 36.385537                               | Longitude:                              | - 98.088816                       |
| WHY CRITICAL:                                                                    |                           |                                     |                                         |                                         |                                   |
| <input checked="" type="checkbox"/> Emergency Service                            |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility        | <input type="checkbox"/> Resource |
| <input type="checkbox"/> Other                                                   |                           |                                     |                                         |                                         |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                         |                                   |
| Location:                                                                        | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                            | Vulnerability quotient            |
| Rural                                                                            | 1964                      | 1                                   | Metal                                   | 1,717.00                                | 40%                               |
| SFHA NO                                                                          | Building value:           | \$111,605                           |                                         | Contents value:                         | \$167,408                         |
|                                                                                  |                           |                                     |                                         |                                         |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                           | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Drought                                                                          | 80%                       | 30%                                 | 55.00%                                  | 153,457                                 |                                   |
| Earthquake                                                                       | 50%                       | 30%                                 | 40.00%                                  | 111,605                                 |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                 | 80.00%                                  | 223,210                                 |                                   |
| Flooding                                                                         | 0%                        | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Hail                                                                             | 70%                       | 15%                                 | 42.50%                                  | 118,581                                 |                                   |
| High winds                                                                       | 70%                       | 25%                                 | 47.50%                                  | 132,531                                 |                                   |
| Lightning                                                                        | 50%                       | 15%                                 | 32.50%                                  | 90,679                                  |                                   |
| Tornado                                                                          | 70%                       | 90%                                 | 80.00%                                  | 223,210                                 |                                   |
| Wildfires                                                                        | 0%                        | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Winter storms                                                                    | 70%                       | 45%                                 | 57.50%                                  | 160,432                                 |                                   |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: United church of Lahoma |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 211 3rd Street Lahoma                     |                                         | COUNTY:                                | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.385631                               | Longitude:                             | - 98.088885                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                        |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility       | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                        |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                        |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                           | Vulnerability quotient            |
| Rural                                                                            | 1964                      | 1                                         | Brick                                   | 3,530.00                               | 50%                               |
| SFHA NO                                                                          | Building value:           | \$300,050                                 |                                         | Contents value:                        | \$120,020                         |
|                                                                                  |                           |                                           |                                         |                                        |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                          | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                      |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 231,039                                |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 168,028                                |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 336,056                                |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                      |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 178,530                                |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 199,533                                |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 136,523                                |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 336,056                                |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                      |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 241,540                                |                                   |

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|                                                                                        |                                  |                                            |                                                |                                                 |                                                     |
|----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|-------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                  |                                            |                                                | <b>FACILITY NAME:</b> Waukomis Christian Church |                                                     |
| <b>FACILITY LOCATION:</b>                                                              |                                  | 201 S Main St                              |                                                | <b>COUNTY:</b> Garfield                         |                                                     |
|                                                                                        |                                  | Latitude:                                  | 36.278791                                      | Longitude:                                      | -97.787676                                          |
| <b>WHY CRITICAL:</b>                                                                   |                                  |                                            |                                                |                                                 |                                                     |
| <input type="checkbox"/> Emergency Service                                             |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>         | <input checked="" type="checkbox"/> <b>Resource</b> |
| <input type="checkbox"/> <b>Other</b>                                                  |                                  |                                            |                                                |                                                 |                                                     |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                                 |                                                     |
| Location:                                                                              | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                                    | Vulnerability quotient                              |
| Rural                                                                                  | 1985                             | 1                                          | Brick                                          | 6,000.00                                        | 20%                                                 |
| SFHA No                                                                                | Building value:                  | \$510,000                                  |                                                | Contents value:                                 | \$255,000                                           |
|                                                                                        |                                  |                                            |                                                |                                                 |                                                     |
|                                                                                        | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                            | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                     | 0%                               | 0%                                         | 0.00%                                          | 0                                               |                                                     |
| <b>Drought</b>                                                                         | 80%                              | 30%                                        | 55.00%                                         | 420,750                                         |                                                     |
| <b>Earthquake</b>                                                                      | 50%                              | 30%                                        | 40.00%                                         | 306,000                                         |                                                     |
| <b>Extreme heat</b>                                                                    | 90%                              | 70%                                        | 80.00%                                         | 612,000                                         |                                                     |
| <b>Flooding</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                               |                                                     |
| <b>Hail</b>                                                                            | 70%                              | 15%                                        | 42.50%                                         | 325,125                                         |                                                     |
| <b>High winds</b>                                                                      | 70%                              | 25%                                        | 47.50%                                         | 363,375                                         |                                                     |
| <b>Lightning</b>                                                                       | 50%                              | 15%                                        | 32.50%                                         | 248,625                                         |                                                     |
| <b>Tornado</b>                                                                         | 70%                              | 90%                                        | 80.00%                                         | 612,000                                         |                                                     |
| <b>Wildfires</b>                                                                       | 0%                               | 0%                                         | 0.00%                                          | 0                                               |                                                     |
| <b>Winter storms</b>                                                                   | 70%                              | 45%                                        | 57.50%                                         | 439,875                                         |                                                     |

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|                                                                                         |                           |                                     |                                         |                                                  |                                   |
|-----------------------------------------------------------------------------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------|-----------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                           |                                     |                                         | <b>FACILITY NAME:</b> Waukomis Police Department |                                   |
| <b>FACILITY LOCATION:</b>                                                               |                           | 121 S Main St.                      |                                         | <b>COUNTY:</b> Garfield                          |                                   |
|                                                                                         |                           | Latitude:                           | 36.278791                               | Longitude:                                       | -97.787676                        |
| <b>WHY CRITICAL:</b>                                                                    |                           |                                     |                                         |                                                  |                                   |
| <input checked="" type="checkbox"/> Emergency Service                                   |                           | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility                 | <input type="checkbox"/> Resource |
|                                                                                         |                           | <input type="checkbox"/> Other      |                                         |                                                  |                                   |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                           |                                     |                                         |                                                  |                                   |
| Location:                                                                               | Year built:               | Stories:                            | Type of Construction:                   | Square Feet:                                     | Vulnerability quotient            |
| Rural                                                                                   | 1983                      | 1                                   | Brick/Sheet Metal                       | 3,907.00                                         | 40%                               |
| SFHA No                                                                                 | Building value:           | \$253,955                           |                                         | Contents value:                                  | \$507,910                         |
|                                                                                         |                           |                                     |                                         |                                                  |                                   |
|                                                                                         | Probability of this risk? | Degree of Impact                    | Percent of loss                         | Value of loss                                    | NOTES                             |
| Dam Failure                                                                             | 0%                        | 0%                                  | 0.00%                                   | 0                                                |                                   |
| Drought                                                                                 | 80%                       | 30%                                 | 55.00%                                  | 419,026                                          |                                   |
| Earthquake                                                                              | 50%                       | 30%                                 | 40.00%                                  | 304,746                                          |                                   |
| Extreme heat                                                                            | 90%                       | 70%                                 | 80.00%                                  | 609,492                                          |                                   |
| Flooding                                                                                | 0%                        | 0%                                  | 0.00%                                   | 0                                                |                                   |
| Hail                                                                                    | 70%                       | 15%                                 | 42.50%                                  | 323,793                                          |                                   |
| High winds                                                                              | 70%                       | 25%                                 | 47.50%                                  | 361,886                                          |                                   |
| Lightning                                                                               | 50%                       | 15%                                 | 32.50%                                  | 247,606                                          |                                   |
| Tornado                                                                                 | 70%                       | 90%                                 | 80.00%                                  | 609,492                                          |                                   |
| Wildfires                                                                               | 0%                        | 0%                                  | 0.00%                                   | 0                                                |                                   |
| Winter storms                                                                           | 70%                       | 45%                                 | 57.50%                                  | 438,072                                          |                                   |

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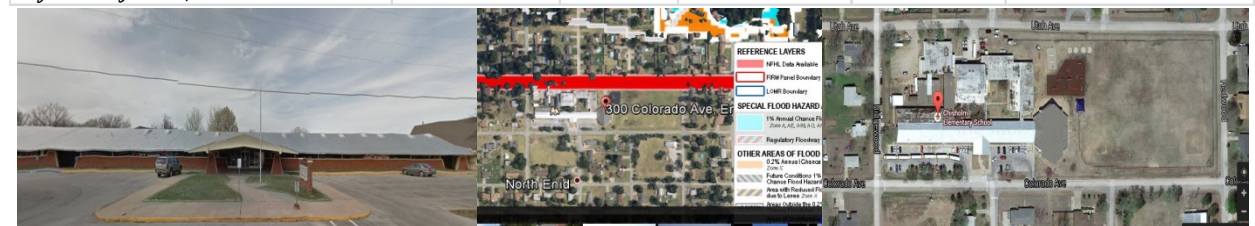


|                                                                                         |                                  |                                            |                        |                                                 |                                                     |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------|-------------------------------------------------|-----------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                        | <b>FACILITY NAME:</b> Waukomis United Methodist |                                                     |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 220 North Main St                          |                        | <b>COUNTY:</b> Garfield                         |                                                     |
|                                                                                         |                                  | Latitude:                                  | 36.281718              | Longitude:                                      | -97.899214                                          |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                        |                                                 |                                                     |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> |                        | <input type="checkbox"/> <b>Health Service</b>  | <input checked="" type="checkbox"/> <b>Resource</b> |
|                                                                                         |                                  | <input type="checkbox"/> <b>Other</b>      |                        |                                                 |                                                     |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                        |                                                 |                                                     |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:  | Square Feet:                                    | Vulnerability quotient                              |
| Rural                                                                                   | 1980                             | 1                                          | Brick                  | 1,768.00                                        | 35%                                                 |
| SFHA No                                                                                 | Building value:                  | \$150,280                                  |                        | Contents value:                                 | \$75,140                                            |
|                                                                                         |                                  |                                            |                        |                                                 |                                                     |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b> | <b>Value of loss</b>                            | <b>NOTES</b>                                        |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                  | 0                                               |                                                     |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                 | 123,981                                         |                                                     |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                 | 90,168                                          |                                                     |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                 | 180,336                                         |                                                     |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                  | 0                                               |                                                     |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                 | 95,804                                          |                                                     |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                 | 107,075                                         |                                                     |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                 | 73,262                                          |                                                     |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                 | 180,336                                         |                                                     |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                  | 0                                               |                                                     |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                 | 129,617                                         |                                                     |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                                  |                                                | FACILITY NAME: Chisholm Elementary School |                                          |
|----------------------------------------------------------------------------------|---------------------------|--------------------------------------------------|------------------------------------------------|-------------------------------------------|------------------------------------------|
| FACILITY LOCATION:                                                               |                           | 300 Colorado Avenue Enid<br>Oklahoma             |                                                | COUNTY:                                   | Garfield County                          |
|                                                                                  |                           | Latitude:                                        | 36.436836                                      | Longitude:                                | -97.869025                               |
| WHY CRITICAL:                                                                    |                           |                                                  |                                                |                                           |                                          |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>   | <input type="checkbox"/> <b>Resource</b> |
|                                                                                  |                           | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                           |                                          |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                                  |                                                |                                           |                                          |
| Location:                                                                        | Year built:               | Stories:                                         | Type of Construction:                          | Square Feet:                              | Vulnerability quotient                   |
| Urban                                                                            | 1970                      | 1                                                | Masonry Concrete                               | 62,908.00                                 | 35%                                      |
| SFHA No                                                                          | Building value:           | \$5,347,180                                      |                                                | Contents value:                           | \$2,673,590                              |
|                                                                                  |                           |                                                  |                                                |                                           |                                          |
|                                                                                  | Probability of this risk? | Degree of Impact                                 | Percent of loss                                | Value of loss                             | NOTES                                    |
| Dam Failure                                                                      | 0%                        | 0%                                               | 0.00%                                          | 0                                         |                                          |
| Drought                                                                          | 80%                       | 30%                                              | 55.00%                                         | 4,411,424                                 |                                          |
| Earthquake                                                                       | 50%                       | 30%                                              | 40.00%                                         | 3,208,308                                 |                                          |
| Extreme heat                                                                     | 90%                       | 70%                                              | 80.00%                                         | 6,416,616                                 |                                          |
| Flooding                                                                         | 0%                        | 0%                                               | 0.00%                                          | 0                                         |                                          |
| Hail                                                                             | 70%                       | 15%                                              | 42.50%                                         | 3,408,827                                 |                                          |
| High winds                                                                       | 70%                       | 25%                                              | 47.50%                                         | 3,809,866                                 |                                          |
| Lightning                                                                        | 50%                       | 15%                                              | 32.50%                                         | 2,606,750                                 |                                          |
| Tornado                                                                          | 70%                       | 90%                                              | 80.00%                                         | 6,416,616                                 |                                          |
| Wildfires                                                                        | 0%                        | 0%                                               | 0.00%                                          | 0                                         |                                          |
| Winter storms                                                                    | 70%                       | 45%                                              | 57.50%                                         | 4,611,943                                 |                                          |



|                                                                                        |                                            |                                            |                                                |                                              |                                                         |
|----------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|------------------------------------------------|----------------------------------------------|---------------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                            |                                            |                                                | <b>FACILITY NAME:</b> Chisholm Middle School |                                                         |
| <b>FACILITY LOCATION:</b>                                                              |                                            | 4202 W. Carrier Rd. Enid<br>Oklahoma       |                                                | <b>COUNTY:</b> Garfield County               |                                                         |
|                                                                                        |                                            | Latitude:                                  | 36.363972                                      | Longitude:                                   | -97.929438                                              |
|                                                                                        |                                            |                                            |                                                |                                              |                                                         |
| <b>WHY CRITICAL:</b>                                                                   | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>      | <input type="checkbox"/> <b>Resource</b> <b>x Other</b> |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                            |                                            |                                                |                                              |                                                         |
| Location:                                                                              | Year built:                                | Stories:                                   | Type of Construction:                          | Square Feet:                                 | Vulnerability quotient                                  |
| Urban                                                                                  | 1973                                       | 1                                          | Brick/Metal                                    | 22,000.00                                    | 35%                                                     |
| SFHA No                                                                                | Building value:                            | \$1,870,000                                |                                                | Contents value:                              | \$935,000                                               |
|                                                                                        |                                            |                                            |                                                |                                              |                                                         |
|                                                                                        | <b>Probability of this risk?</b>           | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                         | <b>NOTES</b>                                            |
| <b>Dam Failure</b>                                                                     | 0%                                         | 0%                                         | 0.00%                                          | 0                                            |                                                         |
| <b>Drought</b>                                                                         | 80%                                        | 30%                                        | 55.00%                                         | 1,542,750                                    |                                                         |
| <b>Earthquake</b>                                                                      | 50%                                        | 30%                                        | 40.00%                                         | 1,122,000                                    |                                                         |
| <b>Extreme heat</b>                                                                    | 90%                                        | 70%                                        | 80.00%                                         | 2,244,000                                    |                                                         |
| <b>Flooding</b>                                                                        | 0%                                         | 0%                                         | 0.00%                                          | 0                                            |                                                         |
| <b>Hail</b>                                                                            | 70%                                        | 15%                                        | 42.50%                                         | 1,192,125                                    |                                                         |
| <b>High winds</b>                                                                      | 70%                                        | 25%                                        | 47.50%                                         | 1,332,375                                    |                                                         |
| <b>Lightning</b>                                                                       | 50%                                        | 15%                                        | 32.50%                                         | 911,625                                      |                                                         |
| <b>Tornado</b>                                                                         | 70%                                        | 90%                                        | 80.00%                                         | 2,244,000                                    |                                                         |
| <b>Wildfires</b>                                                                       | 0%                                         | 0%                                         | 0.00%                                          | 0                                            |                                                         |
| <b>Winter storms</b>                                                                   | 70%                                        | 45%                                        | 57.50%                                         | 1,612,875                                    |                                                         |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Chisholm High School |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 4018 W. Carrier Rd. Enid<br>Oklahoma      |                                         | COUNTY:                             | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.464356                               | Longitude:                          | -97.927808                        |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                     |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                     |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                        | Vulnerability quotient            |
| Urban                                                                            | 1973                      | 1                                         | Brick/Metal                             | 40,000.00                           | 35%                               |
| SFHA No                                                                          | Building value:           | \$3,200,000                               |                                         | Contents value:                     | \$1,600,000                       |
|                                                                                  |                           |                                           |                                         |                                     |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 2,640,000                           |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 1,920,000                           |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 3,840,000                           |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 2,040,000                           |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 2,280,000                           |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 1,560,000                           |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 3,840,000                           |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 2,760,000                           |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                           |                                         |                                     |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Cimmarron Public Schools |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 320 Main Street Lahoma                    |                                         | COUNTY:                                 | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.386857                               | Longitude:                              | - 98.089775                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                         |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility        | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                         |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                         |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                            | Vulnerability quotient            |
| Rural                                                                            | 1964                      | 1                                         | Brick/Metal                             | 40,000.00                               | 50%                               |
| SFHA No                                                                          | Building value:           | \$2,600,000                               |                                         | Contents value:                         | \$1,300,000                       |
|                                                                                  |                           |                                           |                                         |                                         |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                           | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                       |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 2,145,000                               |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 1,560,000                               |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 3,120,000                               |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                       |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 1,657,500                               |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 1,852,500                               |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 1,267,500                               |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 3,120,000                               |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                       |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 2,242,500                               |                                   |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Covington-Douglas ES |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 400 East Main St                          |                                         | COUNTY: Garfield County             |                                   |
|                                                                                  |                           | Latitude:                                 | 36.305444                               | Longitude:                          | - 97.581999                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                     |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                     |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                        | Vulnerability quotient            |
| Rural                                                                            | 1950                      | 1                                         | Brick/Metal                             | 42,500.00                           | 50%                               |
| SFHA NO                                                                          | Building value:           | \$3,612,500                               |                                         | Contents value:                     | \$1,806,250                       |
|                                                                                  |                           |                                           |                                         |                                     |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 2,980,313                           |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 2,167,500                           |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 4,335,000                           |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 2,302,969                           |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 2,573,906                           |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 1,761,094                           |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 4,335,000                           |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 3,115,781                           |                                   |

Hazard Mitigation Specialists, LLC



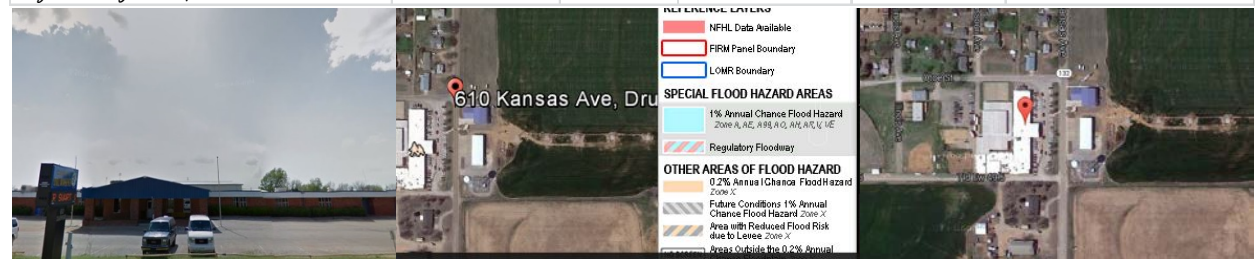
| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Covington-Douglas HS |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 400 East Main Street                |                                         | COUNTY:                             | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.305444                           | Longitude:                              | - 97.581999                         |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                     |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                     |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                        | Vulnerability quotient            |
| Rural                                                                            | 1950                                       | 1                                   | Brick/Metal                             | 42,500.00                           | 50%                               |
| SFHA NO                                                                          | Building value:                            | \$3,612,500                         |                                         | Contents value:                     | \$1,806,250                       |
|                                                                                  |                                            |                                     |                                         |                                     |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                   |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 2,980,313                           |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 2,167,500                           |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 4,335,000                           |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                   |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,302,969                           |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 2,573,906                           |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 1,761,094                           |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 4,335,000                           |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                   |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 3,115,781                           |                                   |

Hazard Mitigation Specialists, LLC



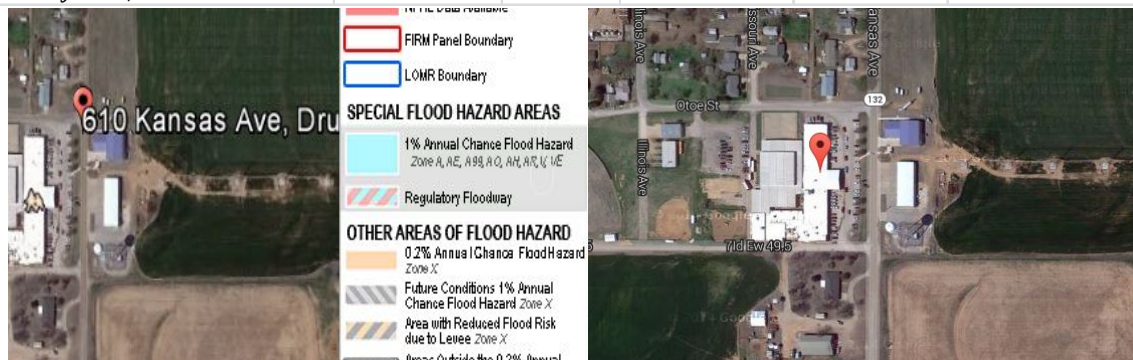


| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Drummond ES       |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 610 Kansas Ave                      |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.297192                           | Longitude:                              | -98.033485                       |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Rural                                                                            | 1920                                       | 1                                   | Brick/Metal                             | 47,000.00                        | 60%                               |
| SFHA NO                                                                          | Building value:                            | \$3,995,000                         |                                         | Contents value:                  | \$1,997,500                       |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 3,295,875                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 2,397,000                        |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 4,794,000                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,546,813                        |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 2,846,438                        |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 1,947,563                        |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 4,794,000                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 3,445,688                        |                                   |



|                                                                                         |                                  |                                                  |                                                |                                         |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                  |                                                | <b>FACILITY NAME:</b> Drummond Jr. High |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 610 Kansas                                       |                                                | <b>COUNTY:</b> Garfield County          |                                          |
|                                                                                         |                                  | Latitude:                                        | 36.297192                                      | Longitude:                              | -98.033485                               |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                  |                                                |                                         |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b> | <input type="checkbox"/> <b>Resource</b> |
|                                                                                         |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                         |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                                                |                                         |                                          |
| Location:                                                                               | Year built:                      | Stories:                                         | Type of Construction:                          | Square Feet:                            | Vulnerability quotient                   |
| Rural                                                                                   | 1920                             | 1                                                | Brick/Metal                                    | 47,000.00                               | 60%                                      |
| SFHA NO                                                                                 | Building value:                  | \$3,995,000                                      |                                                | Contents value:                         | \$1,997,500                              |
|                                                                                         |                                  |                                                  |                                                |                                         |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b>                         | <b>Value of loss</b>                    | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                               | 0.00%                                          | 0                                       |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                              | 55.00%                                         | 3,295,875                               |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                              | 40.00%                                         | 2,397,000                               |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                              | 80.00%                                         | 4,794,000                               |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                               | 0.00%                                          | 0                                       |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                              | 42.50%                                         | 2,546,813                               |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                              | 47.50%                                         | 2,846,438                               |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                              | 32.50%                                         | 1,947,563                               |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                              | 80.00%                                         | 4,794,000                               |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                               | 0.00%                                          | 0                                       |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                              | 57.50%                                         | 3,445,688                               |                                          |

Hazard Mitigation Specialists, LLC



|                                                                                         |                                  |                                                       |                                                |                                         |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                       |                                                | <b>FACILITY NAME:</b> Drummond HS       |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 610 Kansas                                            |                                                | <b>COUNTY:</b> Garfield County          |                                          |
|                                                                                         |                                  | Latitude:                                             | 36.297192                                      | Longitude:                              | -98.033485                               |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                       |                                                |                                         |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input checked="" type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b> | <input type="checkbox"/> <b>Resource</b> |
| <input checked="" type="checkbox"/> <b>Other</b>                                        |                                  |                                                       |                                                |                                         |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                       |                                                |                                         |                                          |
| Location:                                                                               | Year built:                      | Stories:                                              | Type of Construction:                          | Square Feet:                            | Vulnerability quotient                   |
| Rural                                                                                   | 1920                             | 1                                                     | Brick/Metal                                    | 47,000.00                               | 60%                                      |
| SFHA NO                                                                                 | Building value:                  | \$3,995,000                                           |                                                | Contents value:                         | \$1,997,500                              |
|                                                                                         |                                  |                                                       |                                                |                                         |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                               | <b>Percent of loss</b>                         | <b>Value of loss</b>                    | <b>NOTES</b>                             |
| Dam Failure                                                                             | 0%                               | 0%                                                    | 0.00%                                          | 0                                       |                                          |
| Drought                                                                                 | 80%                              | 30%                                                   | 55.00%                                         | 3,295,875                               |                                          |
| Earthquake                                                                              | 50%                              | 30%                                                   | 40.00%                                         | 2,397,000                               |                                          |
| Extreme heat                                                                            | 90%                              | 70%                                                   | 80.00%                                         | 4,794,000                               |                                          |
| Flooding                                                                                | 0%                               | 0%                                                    | 0.00%                                          | 0                                       |                                          |
| Hail                                                                                    | 70%                              | 15%                                                   | 42.50%                                         | 2,546,813                               |                                          |
| High winds                                                                              | 70%                              | 25%                                                   | 47.50%                                         | 2,846,438                               |                                          |
| Lightning                                                                               | 50%                              | 15%                                                   | 32.50%                                         | 1,947,563                               |                                          |
| Tornado                                                                                 | 70%                              | 90%                                                   | 80.00%                                         | 4,794,000                               |                                          |
| Wildfires                                                                               | 0%                               | 0%                                                    | 0.00%                                          | 0                                       |                                          |
| Winter storms                                                                           | 70%                              | 45%                                                   | 57.50%                                         | 3,445,688                               |                                          |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Adams ES          |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 2200 E. Randolph Ave                |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.398299                           | Longitude:                              | - 97.846197                      |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 1915                                       | 2                                   | Brick                                   | 25,600.00                        | 60%                               |
| SFHA No                                                                          | Building value:                            | \$2,176,000                         |                                         | Contents value:                  | \$1,088,000                       |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 1,795,200                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 1,305,600                        |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 2,611,200                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 1,387,200                        |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 1,550,400                        |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 1,060,800                        |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 2,611,200                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 1,876,800                        |                                   |





| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Coolidge ES       |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 1515 E Ash Ave Enid Oklahoma        |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.40578                            | Longitude:                              | - 97.855496                      |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 1960                                       | 1                                   | Brick                                   | 13,539.00                        | 50%                               |
| SFHA No                                                                          | Building value:                            | \$1,150,815                         |                                         | Contents value:                  | \$575,408                         |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 949,423                          |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 690,489                          |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 1,380,978                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 733,645                          |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 819,956                          |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 561,022                          |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 1,380,978                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 992,578                          |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                         |                                  |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: De Witt Waller Middle School |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 2604 W. Randolph Ave Enid<br>Oklahoma     |                                         | COUNTY:                                     | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.398943                               | Longitude:                                  | - 97.911504                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                             |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility            | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                             |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                             |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                                | Vulnerability quotient            |
| Urban                                                                            | 1959                      | 2                                         | Brick                                   | 96,870.00                                   | 60%                               |
| SFHA No                                                                          | Building value:           | \$8,233,950                               |                                         | Contents value:                             | \$4,116,975                       |
|                                                                                  |                           |                                           |                                         |                                             |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                               | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                           |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 6,793,009                                   |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 4,940,370                                   |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 9,880,740                                   |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                           |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 5,249,143                                   |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 5,866,689                                   |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 4,014,051                                   |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 9,880,740                                   |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                           |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 7,101,782                                   |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                           |                                         |                                             |                                   |



|                                                                                         |                                  |                                                  |                        |                                         |                        |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------|-----------------------------------------|------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                                  |                        | <b>FACILITY NAME:</b> Eisenhower ES     |                        |
| <b>FACILITY LOCATION:</b> 1301 W. Fox Dr. Enid Oklahoma                                 |                                  |                                                  |                        | <b>COUNTY:</b> Garfield County          |                        |
| Latitude:                                                                               |                                  | 36.346688                                        |                        | Longitude: - 97.898026                  |                        |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                                  |                        |                                         |                        |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b>       |                        | <input type="checkbox"/> Health Service |                        |
|                                                                                         |                                  | <input type="checkbox"/> Utility                 |                        | <input type="checkbox"/> Resource       |                        |
|                                                                                         |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                        |                                         |                        |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                        |                                         |                        |
| Location:                                                                               | Year built:                      | Stories:                                         | Type of Construction:  | Square Feet:                            | Vulnerability quotient |
| Urban                                                                                   | 1960                             | 1                                                | Brick                  | 13,539.00                               | 50%                    |
| SFHA NO                                                                                 | Building value:                  | \$1,150,815                                      |                        | Contents value:                         | \$575,408              |
|                                                                                         |                                  |                                                  |                        |                                         |                        |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b> | <b>Value of loss</b>                    | <b>NOTES</b>           |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                               | 0.00%                  | 0                                       |                        |
| <b>Drought</b>                                                                          | 80%                              | 30%                                              | 55.00%                 | 949,423                                 |                        |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                              | 40.00%                 | 690,489                                 |                        |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                              | 80.00%                 | 1,380,978                               |                        |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                               | 0.00%                  | 0                                       |                        |
| <b>Hail</b>                                                                             | 70%                              | 15%                                              | 42.50%                 | 733,645                                 |                        |
| <b>High winds</b>                                                                       | 70%                              | 25%                                              | 47.50%                 | 819,956                                 |                        |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                              | 32.50%                 | 561,022                                 |                        |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                              | 80.00%                 | 1,380,978                               |                        |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                               | 0.00%                  | 0                                       |                        |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                              | 57.50%                 | 992,578                                 |                        |

Hazard Mitigation Specialists, LLC



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Emerson Middle School |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|--------------------------------------|-----------------------------------|
| FACILITY LOCATION: 700 W. Elm Ave Enid Oklahoma                                  |                                            |                                     | COUNTY: Garfield County                 |                                      |                                   |
| Latitude: 36.400283                                                              |                                            | Longitude: - 97.88664               |                                         |                                      |                                   |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility     | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                      |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                      |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                         | Vulnerability quotient            |
| Urban                                                                            | 1920                                       | 2                                   | Brick                                   | 50,086.00                            | 60%                               |
| SFHA NO                                                                          | Building value:                            | \$4,257,310                         |                                         | Contents value:                      | \$2,128,655                       |
|                                                                                  |                                            |                                     |                                         |                                      |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                        | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                    |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 3,512,281                            |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 2,554,386                            |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 5,108,772                            |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                    |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,714,035                            |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 3,033,333                            |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 2,075,439                            |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 5,108,772                            |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                    |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 3,671,930                            |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                         |                                      |                                   |

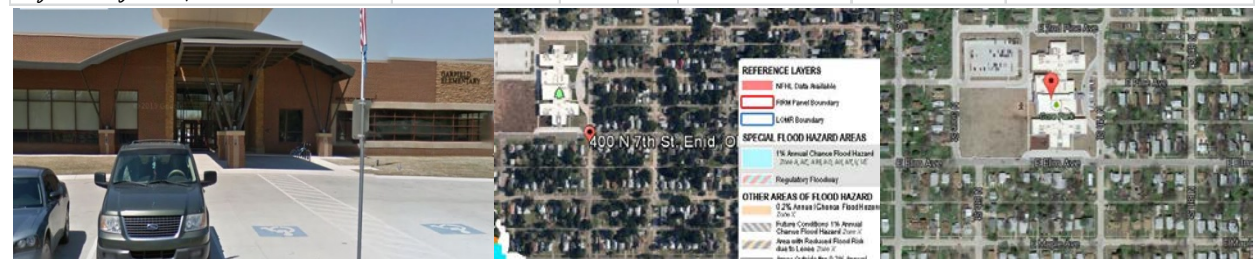




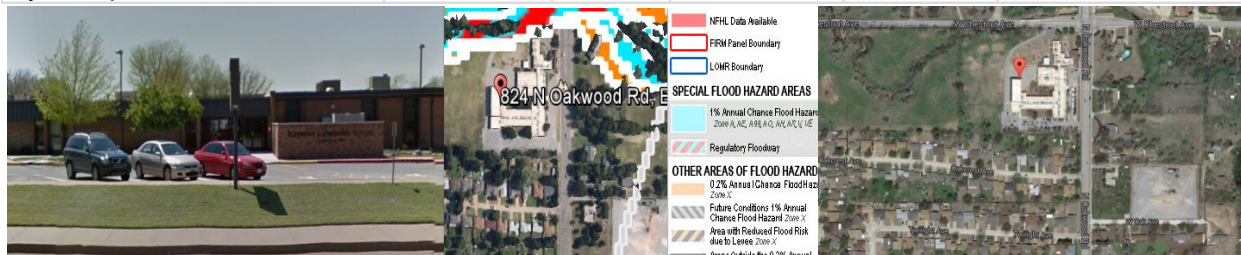
| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                            |                                         | FACILITY NAME: Enid HS           |                                                  |
|----------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------------|----------------------------------|--------------------------------------------------|
| FACILITY LOCATION:                                                               |                                            | 611 W Wabash Ave. Enid<br>Oklahoma         |                                         | COUNTY:                          | Garfield County                                  |
|                                                                                  |                                            | Latitude:                                  | 36.387989                               | Longitude:                       | - 97.885462                                      |
|                                                                                  |                                            |                                            |                                         |                                  |                                                  |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource <b>x Other</b> |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                            |                                         |                                  |                                                  |
| Location:                                                                        | Year built:                                | Stories:                                   | Type of Construction:                   | Square Feet:                     | Vulnerability quotient                           |
| Urban                                                                            | 1898                                       | 3                                          | Brick                                   | 209,727.00                       | 60%                                              |
| SFHA NO                                                                          | Building value:                            | \$17,826,795                               |                                         | Contents value:                  | \$8,913,398                                      |
|                                                                                  |                                            |                                            |                                         |                                  |                                                  |
|                                                                                  | Probability of this risk?                  | Degree of Impact                           | Percent of loss                         | Value of loss                    | NOTES                                            |
| Dam Failure                                                                      | 0%                                         | 0%                                         | 0.00%                                   | 0                                |                                                  |
| Drought                                                                          | 80%                                        | 30%                                        | 55.00%                                  | 14,707,106                       |                                                  |
| Earthquake                                                                       | 50%                                        | 30%                                        | 40.00%                                  | 10,696,077                       |                                                  |
| Extreme heat                                                                     | 90%                                        | 70%                                        | 80.00%                                  | 21,392,154                       |                                                  |
| Flooding                                                                         | 0%                                         | 0%                                         | 0.00%                                   | 0                                |                                                  |
| Hail                                                                             | 70%                                        | 15%                                        | 42.50%                                  | 11,364,582                       |                                                  |
| High winds                                                                       | 70%                                        | 25%                                        | 47.50%                                  | 12,701,592                       |                                                  |
| Lightning                                                                        | 50%                                        | 15%                                        | 32.50%                                  | 8,690,563                        |                                                  |
| Tornado                                                                          | 70%                                        | 90%                                        | 80.00%                                  | 21,392,154                       |                                                  |
| Wildfires                                                                        | 0%                                         | 0%                                         | 0.00%                                   | 0                                |                                                  |
| Winter storms                                                                    | 70%                                        | 45%                                        | 57.50%                                  | 15,375,611                       |                                                  |



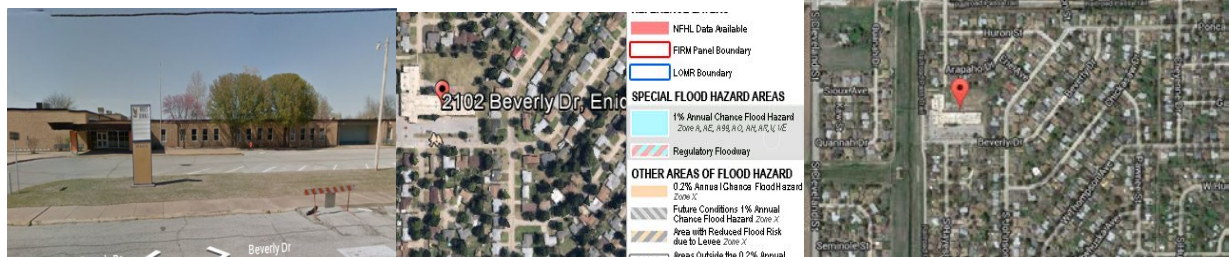
| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Garfield ES       |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 400 N. 7th St. Enid Oklahoma        |                                         | COUNTY:                          | Garfield county                   |
|                                                                                  | Latitude:                                  | 36.400607                           | Longitude:                              | - 97.869007                      |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 2011                                       | 1                                   | Brick/Metal                             | 37,072.00                        | 10%                               |
| SFHA NO                                                                          | Building value:                            | \$3,151,120                         |                                         | Contents value:                  | \$1,575,650                       |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 2,599,724                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 1,890,708                        |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 3,781,416                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,008,877                        |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 2,245,216                        |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 1,536,200                        |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 3,781,416                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 2,717,893                        |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Glenwood ES Historic |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|-------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 824 N. Oakwood Dr. Enid<br>Oklahoma       |                                         | COUNTY:                             | Garfield County                   |
|                                                                                  | Latitude:                 | 36.404263                                 | Longitude:                              | - 97.926348                         |                                   |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                     |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility    | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                     |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                     |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                        | Vulnerability quotient            |
| Urban                                                                            | 1893                      | 1                                         | Brick                                   | 35,075.00                           | 60%                               |
| SFHA No                                                                          | Building value:           | \$2,981,375                               |                                         | Contents value:                     | \$1,490,688                       |
|                                                                                  |                           |                                           |                                         |                                     |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                       | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 2,459,635                           |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 1,788,825                           |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 3,577,650                           |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 1,900,627                           |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 2,124,230                           |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 1,453,420                           |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 3,577,650                           |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                   |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 2,571,436                           |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                           |                                         |                                     |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Hayes ES          |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 2102 Beverly Drive Enid<br>Oklahoma       |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                 | 36.381124                                 | Longitude:                              | - 97.904155                      |                                   |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                  |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                  |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 1963                      | 1                                         | Brick                                   | 25,000.00                        | 50%                               |
| SFHA No                                                                          | Building value:           | \$2,125,000                               |                                         | Contents value:                  | \$1,062,500                       |
|                                                                                  |                           |                                           |                                         |                                  |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                       | 39%                                       | 59.50%                                  | 1,896,563                        |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 1,275,000                        |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 2,550,000                        |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 1,354,688                        |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 1,514,063                        |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 1,035,938                        |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 2,550,000                        |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 1,832,813                        |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                           |                                         |                                  |                                   |





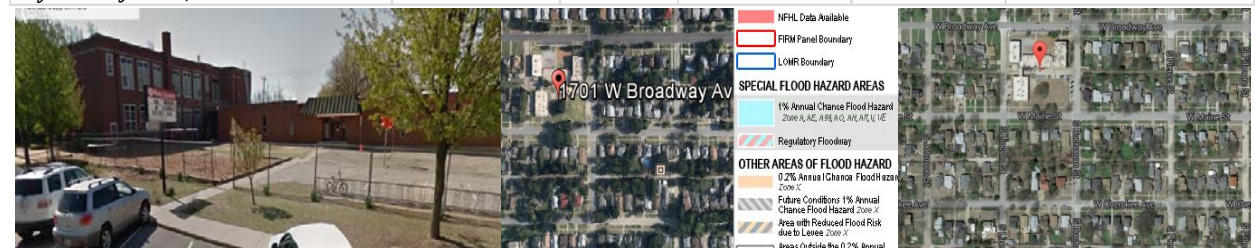
| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Hoover ES         |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 2800 West maine Enid<br>Oklahoma    |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  |                                            | Latitude:                           | 36.395773                               | Longitude:                       | - 97.91288                        |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 1960                                       | 1                                   | Brick                                   | 25,000.00                        | 50%                               |
| SFHA No                                                                          | Building value:                            | \$2,125,000                         |                                         | Contents value:                  | \$1,062,500                       |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 1,753,125                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 1,275,000                        |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 2,550,000                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 1,354,688                        |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 1,514,063                        |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 1,035,938                        |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 2,550,000                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 1,832,813                        |                                   |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                                  |                                                | FACILITY NAME: McKinley ES              |                                          |
|----------------------------------------------------------------------------------|---------------------------|--------------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------------|
| FACILITY LOCATION:                                                               |                           | 1701 West Broadway Ave Enid<br>Oklahoma          |                                                | COUNTY:                                 | Garfield county                          |
|                                                                                  |                           | Latitude:                                        | 36.396216                                      | Longitude:                              | - 97.899654                              |
| WHY CRITICAL:                                                                    |                           |                                                  |                                                |                                         |                                          |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b> | <input type="checkbox"/> <b>Resource</b> |
|                                                                                  |                           | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                         |                                          |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                                  |                                                |                                         |                                          |
| Location:                                                                        | Year built:               | Stories:                                         | Type of Construction:                          | Square Feet:                            | Vulnerability quotient                   |
| Urban                                                                            | 1963                      | 1                                                | Brick                                          | 13,000.00                               | 50%                                      |
| SFHA NO                                                                          | Building value:           | \$1,105,000                                      |                                                | Contents value:                         | \$552,500                                |
|                                                                                  |                           |                                                  |                                                |                                         |                                          |
|                                                                                  | Probability of this risk? | Degree of Impact                                 | Percent of loss                                | Value of loss                           | NOTES                                    |
| Dam Failure                                                                      | 0%                        | 0%                                               | 0.00%                                          | 0                                       |                                          |
| Drought                                                                          | 80%                       | 30%                                              | 55.00%                                         | 911,625                                 |                                          |
| Earthquake                                                                       | 50%                       | 30%                                              | 40.00%                                         | 663,000                                 |                                          |
| Extreme heat                                                                     | 90%                       | 70%                                              | 80.00%                                         | 1,326,000                               |                                          |
| Flooding                                                                         | 0%                        | 0%                                               | 0.00%                                          | 0                                       |                                          |
| Hail                                                                             | 70%                       | 15%                                              | 42.50%                                         | 704,438                                 |                                          |
| High winds                                                                       | 70%                       | 25%                                              | 47.50%                                         | 787,313                                 |                                          |
| Lightning                                                                        | 50%                       | 15%                                              | 32.50%                                         | 538,688                                 |                                          |
| Tornado                                                                          | 70%                       | 90%                                              | 80.00%                                         | 1,326,000                               |                                          |
| Wildfires                                                                        | 0%                        | 0%                                               | 0.00%                                          | 0                                       |                                          |
| Winter storms                                                                    | 70%                       | 45%                                              | 57.50%                                         | 953,063                                 |                                          |



| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Monroe ES         |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 400 West Cotton Wood Enid<br>Oklahoma     |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.4192                                 | Longitude:                       | - 97.883149                       |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                  |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                  |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Urban                                                                            | 1963                      | 1                                         | Brick                                   | 25,000.00                        | 50%                               |
| SFHA YES                                                                         | Building value:           | \$2,125,000                               |                                         | Contents value:                  | \$1,062,500                       |
|                                                                                  |                           |                                           |                                         |                                  |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 1,753,125                        |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 1,275,000                        |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 2,550,000                        |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 1,354,688                        |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 1,514,063                        |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 1,035,938                        |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 2,550,000                        |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 1,832,813                        |                                   |
| Hazard Mitigation Specialists, LLC                                               |                           |                                           |                                         |                                  |                                   |





| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                            |                                                | FACILITY NAME: Taft ES                  |                                          |
|----------------------------------------------------------------------------------|---------------------------|--------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------------|
| FACILITY LOCATION:                                                               |                           | 1002 Sequoyah Dr. Enid<br>Oklahoma         |                                                | COUNTY:                                 | Garfield County                          |
|                                                                                  | Latitude:                 | 36.38478                                   | Longitude:                                     | - 97.893652                             |                                          |
| WHY CRITICAL:                                                                    |                           |                                            |                                                |                                         |                                          |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b> | <input type="checkbox"/> <b>Resource</b> |
| <input checked="" type="checkbox"/> <b>Other</b>                                 |                           |                                            |                                                |                                         |                                          |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                            |                                                |                                         |                                          |
| Location:                                                                        | Year built:               | Stories:                                   | Type of Construction:                          | Square Feet:                            | Vulnerability quotient                   |
| Urban                                                                            | 1937                      | 1                                          | Brick                                          | 17,034.00                               | 60%                                      |
| SFHA No                                                                          | Building value:           | \$1,447,890                                |                                                | Contents value:                         | \$723,945                                |
|                                                                                  |                           |                                            |                                                |                                         |                                          |
|                                                                                  | Probability of this risk? | Degree of Impact                           | Percent of loss                                | Value of loss                           | NOTES                                    |
| Dam Failure                                                                      | 0%                        | 0%                                         | 0.00%                                          | 0                                       |                                          |
| Drought                                                                          | 80%                       | 30%                                        | 55.00%                                         | 1,194,509                               |                                          |
| Earthquake                                                                       | 50%                       | 30%                                        | 40.00%                                         | 868,734                                 |                                          |
| Extreme heat                                                                     | 90%                       | 70%                                        | 80.00%                                         | 1,737,468                               |                                          |
| Flooding                                                                         | 0%                        | 0%                                         | 0.00%                                          | 0                                       |                                          |
| Hail                                                                             | 70%                       | 15%                                        | 42.50%                                         | 923,030                                 |                                          |
| High winds                                                                       | 70%                       | 25%                                        | 47.50%                                         | 1,031,622                               |                                          |
| Lightning                                                                        | 50%                       | 15%                                        | 32.50%                                         | 705,846                                 |                                          |
| Tornado                                                                          | 70%                       | 90%                                        | 80.00%                                         | 1,737,468                               |                                          |
| Wildfires                                                                        | 0%                        | 0%                                         | 0.00%                                          | 0                                       |                                          |
| Winter storms                                                                    | 70%                       | 45%                                        | 57.50%                                         | 1,248,805                               |                                          |



|                                                                                        |                                  |                                                  |                                                |                                                          |                                          |
|----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------------------------------|----------------------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                  |                                                  |                                                | <b>FACILITY NAME:</b> Zion Lutheran Church and preschool |                                          |
| <b>FACILITY LOCATION:</b>                                                              |                                  | 507 Fairmont Road                                |                                                | <b>COUNTY:</b> Garfield County                           |                                          |
|                                                                                        |                                  | Latitude:                                        | 36.35665                                       | Longitude:                                               | - 97.710695                              |
| <b>WHY CRITICAL:</b>                                                                   |                                  |                                                  |                                                |                                                          |                                          |
| <input type="checkbox"/> Emergency Service                                             |                                  | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                  | <input type="checkbox"/> <b>Resource</b> |
|                                                                                        |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                                          |                                          |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                                                |                                                          |                                          |
| Location:                                                                              | Year built:                      | Stories:                                         | Type of Construction:                          | Square Feet:                                             | Vulnerability quotient                   |
| Rural                                                                                  | 1964                             | 1                                                | Brick                                          | 8,055.00                                                 | 35%                                      |
| SFHA NO                                                                                | Building value:                  | \$684,675                                        |                                                | Contents value:                                          | \$342,338                                |
|                                                                                        |                                  |                                                  |                                                |                                                          |                                          |
|                                                                                        | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b>                         | <b>Value of loss</b>                                     | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                     | 0%                               | 0%                                               | 0.00%                                          | 0                                                        |                                          |
| <b>Drought</b>                                                                         | 80%                              | 30%                                              | 55.00%                                         | 564,857                                                  |                                          |
| <b>Earthquake</b>                                                                      | 50%                              | 30%                                              | 40.00%                                         | 410,805                                                  |                                          |
| <b>Extreme heat</b>                                                                    | 90%                              | 70%                                              | 80.00%                                         | 821,610                                                  |                                          |
| <b>Flooding</b>                                                                        | 0%                               | 0%                                               | 0.00%                                          | 0                                                        |                                          |
| <b>Hail</b>                                                                            | 70%                              | 15%                                              | 42.50%                                         | 436,481                                                  |                                          |
| <b>High winds</b>                                                                      | 70%                              | 25%                                              | 47.50%                                         | 487,831                                                  |                                          |
| <b>Lightning</b>                                                                       | 50%                              | 15%                                              | 32.50%                                         | 333,779                                                  |                                          |
| <b>Tornado</b>                                                                         | 70%                              | 90%                                              | 80.00%                                         | 821,610                                                  |                                          |
| <b>Wildfires</b>                                                                       | 0%                               | 0%                                               | 0.00%                                          | 0                                                        |                                          |
| <b>Winter storms</b>                                                                   | 70%                              | 45%                                              | 57.50%                                         | 590,532                                                  |                                          |



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Garber ES         |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 108 E. Garber Rd                    |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.43318                            | Longitude:                              | -97.582954                       |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Rural                                                                            | 1930                                       | 1                                   | Masonry concrete                        | 50,000.00                        | 70%                               |
| SFHA NO                                                                          | Building value:                            | \$4,250,000                         |                                         | Contents value:                  | \$2,125,000                       |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 3,506,250                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 2,550,000                        |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 5,100,000                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,709,375                        |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 3,028,125                        |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 2,071,875                        |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 5,100,000                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 3,665,625                        |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Garber HS         |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 108 E Garber Rd                     |                                         | COUNTY:                          | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.43318                            | Longitude:                              | -97.582954                       |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                  |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                  |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                     | Vulnerability quotient            |
| Rural                                                                            | 1930                                       | 1                                   | Masonry Brick                           | 50,000.00                        | 70%                               |
| SFHA NO                                                                          | Building value:                            | \$4,250,000                         |                                         | Contents value:                  | \$2,125,000                       |
|                                                                                  |                                            |                                     |                                         |                                  |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                    | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 3,506,250                        |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 2,550,000                        |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 5,100,000                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 2,709,375                        |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 3,028,125                        |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 2,071,875                        |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 5,100,000                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 3,665,625                        |                                   |





| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Garber Bus Building |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 600 Main Street                     |                                         | COUNTY:                            | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.435719                           | Longitude:                              | -97.582265                         |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                    |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility   | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                    |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                    |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                       | Vulnerability quotient            |
| Rural                                                                            | 1950                                       | 1                                   | Metal                                   | 8,300.00                           | 65%                               |
| SFHA NO                                                                          | Building value:                            | \$539,500                           |                                         | Contents value:                    | \$809,250                         |
|                                                                                  |                                            |                                     |                                         |                                    |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                      | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                  |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 741,813                            |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 539,500                            |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 1,079,000                          |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                  |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 573,219                            |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 640,656                            |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 438,344                            |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 1,079,000                          |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                  |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 775,531                            |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                         |                                    |                                   |



|                                                                                         |                                  |                                            |                                                |                                            |                                          |
|-----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                 |                                  |                                            |                                                | <b>FACILITY NAME:</b> Kremlin Hillsdale ES |                                          |
| <b>FACILITY LOCATION:</b>                                                               |                                  | 505 5th Street Kremlin<br>Oklahoma         |                                                | <b>COUNTY:</b> Garfield                    |                                          |
|                                                                                         |                                  | Latitude:                                  | 36.54439                                       | Longitude:                                 | -97.830335                               |
| <b>WHY CRITICAL:</b>                                                                    |                                  |                                            |                                                |                                            |                                          |
| <input type="checkbox"/> Emergency Service                                              |                                  | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>    | <input type="checkbox"/> <b>Resource</b> |
| <input checked="" type="checkbox"/> <b>Other</b>                                        |                                  |                                            |                                                |                                            |                                          |
| <b>ABOUT THE STRUCTURE:</b> Vulnerability due to location, age and type of construction |                                  |                                            |                                                |                                            |                                          |
| Location:                                                                               | Year built:                      | Stories:                                   | Type of Construction:                          | Square Feet:                               | Vulnerability quotient                   |
| Rural                                                                                   | 1964                             | 1                                          | Brick/Sheet Metal                              | 30,000.00                                  | 35%                                      |
| SFHA No                                                                                 | Building value:                  | \$2,550,000                                |                                                | Contents value:                            | \$1,275,000                              |
|                                                                                         |                                  |                                            |                                                |                                            |                                          |
|                                                                                         | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                       | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                      | 0%                               | 0%                                         | 0.00%                                          | 0                                          |                                          |
| <b>Drought</b>                                                                          | 80%                              | 30%                                        | 55.00%                                         | 2,103,750                                  |                                          |
| <b>Earthquake</b>                                                                       | 50%                              | 30%                                        | 40.00%                                         | 1,530,000                                  |                                          |
| <b>Extreme heat</b>                                                                     | 90%                              | 70%                                        | 80.00%                                         | 3,060,000                                  |                                          |
| <b>Flooding</b>                                                                         | 0%                               | 0%                                         | 0.00%                                          | 0                                          |                                          |
| <b>Hail</b>                                                                             | 70%                              | 15%                                        | 42.50%                                         | 1,625,625                                  |                                          |
| <b>High winds</b>                                                                       | 70%                              | 25%                                        | 47.50%                                         | 1,816,875                                  |                                          |
| <b>Lightning</b>                                                                        | 50%                              | 15%                                        | 32.50%                                         | 1,243,125                                  |                                          |
| <b>Tornado</b>                                                                          | 70%                              | 90%                                        | 80.00%                                         | 3,060,000                                  |                                          |
| <b>Wildfires</b>                                                                        | 0%                               | 0%                                         | 0.00%                                          | 0                                          |                                          |
| <b>Winter storms</b>                                                                    | 70%                              | 45%                                        | 57.50%                                         | 2,199,375                                  |                                          |



| CRITICAL FACILITY IDENTIFICATION                                                 |                                     |                                         |                                  | FACILITY NAME: Kremlin Hillsdale HS |                                           |
|----------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-------------------------------------|-------------------------------------------|
| FACILITY LOCATION:                                                               |                                     | 705 5th Street Kremlin                  |                                  | COUNTY:                             | Garfield                                  |
|                                                                                  | Latitude:                           | 36.543178                               | Longitude:                       | -97.830485                          |                                           |
| WHY CRITICAL:                                                                    |                                     |                                         |                                  |                                     |                                           |
| <input type="checkbox"/> Emergency Service                                       | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource   | <input checked="" type="checkbox"/> Other |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                     |                                         |                                  |                                     |                                           |
| Location:                                                                        | Year built:                         | Stories:                                | Type of Construction:            | Square Feet:                        | Vulnerability quotient                    |
| Rural                                                                            | 1920                                | 1                                       | Brick                            | 28,549.00                           | 60%                                       |
| SFHA no                                                                          | Building value:                     | \$2,426,665                             |                                  | Contents value:                     | \$1,213,333                               |
|                                                                                  |                                     |                                         |                                  |                                     |                                           |
|                                                                                  | Probability of this risk?           | Degree of Impact                        | Percent of loss                  | Value of loss                       | NOTES                                     |
| Dam Failure                                                                      | 0%                                  | 0%                                      | 0.00%                            | 0                                   |                                           |
| Drought                                                                          | 80%                                 | 30%                                     | 55.00%                           | 2,001,999                           |                                           |
| Earthquake                                                                       | 50%                                 | 30%                                     | 40.00%                           | 1,455,999                           |                                           |
| Extreme heat                                                                     | 90%                                 | 70%                                     | 80.00%                           | 2,911,998                           |                                           |
| Flooding                                                                         | 0%                                  | 0%                                      | 0.00%                            | 0                                   |                                           |
| Hail                                                                             | 70%                                 | 15%                                     | 42.50%                           | 1,546,999                           |                                           |
| High winds                                                                       | 70%                                 | 25%                                     | 47.50%                           | 1,728,999                           |                                           |
| Lightning                                                                        | 50%                                 | 15%                                     | 32.50%                           | 1,182,999                           |                                           |
| Tornado                                                                          | 70%                                 | 90%                                     | 80.00%                           | 2,911,998                           |                                           |
| Wildfires                                                                        | 0%                                  | 0%                                      | 0.00%                            | 0                                   |                                           |
| Winter storms                                                                    | 70%                                 | 45%                                     | 57.50%                           | 2,092,999                           |                                           |



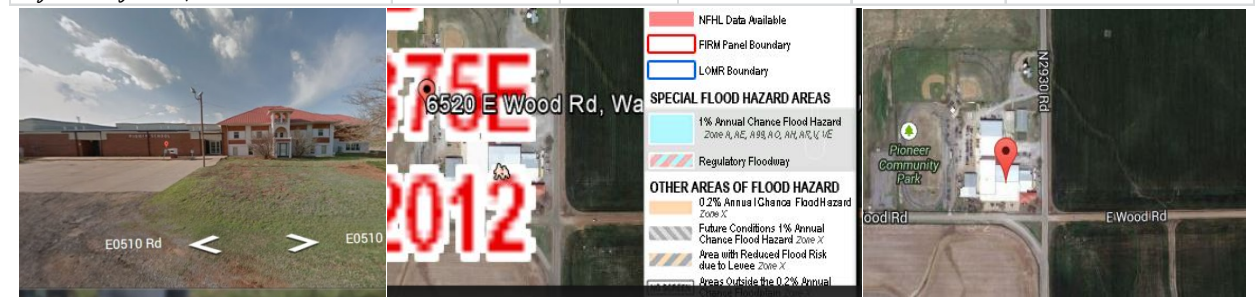
| CRITICAL FACILITY IDENTIFICATION                                                 |                                     |                                         |                                  | FACILITY NAME: Pioneer Pleasant Vale ES |                                           |
|----------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------------|-----------------------------------------|-------------------------------------------|
| FACILITY LOCATION:                                                               |                                     | 6020 East Wood Road Enid                |                                  | COUNTY:                                 | Garfield County                           |
|                                                                                  | Latitude:                           | 36.419976                               | Longitude:                       | -97.791157                              |                                           |
| WHY CRITICAL:                                                                    |                                     |                                         |                                  |                                         |                                           |
| <input type="checkbox"/> Emergency Service                                       | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility | <input type="checkbox"/> Resource       | <input checked="" type="checkbox"/> Other |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                     |                                         |                                  |                                         |                                           |
| Location:                                                                        | Year built:                         | Stories:                                | Type of Construction:            | Square Feet:                            | Vulnerability quotient                    |
| Rural                                                                            | 1920                                | 1                                       | Brick/Metal                      | 22,639.00                               | 60%                                       |
| SFHA No                                                                          | Building value:                     | \$1,924,315                             |                                  | Contents value:                         | \$962,158                                 |
|                                                                                  |                                     |                                         |                                  |                                         |                                           |
|                                                                                  | Probability of this risk?           | Degree of Impact                        | Percent of loss                  | Value of loss                           | NOTES                                     |
| Dam Failure                                                                      | 0%                                  | 0%                                      | 0.00%                            | 0                                       |                                           |
| Drought                                                                          | 80%                                 | 30%                                     | 55.00%                           | 1,587,560                               |                                           |
| Earthquake                                                                       | 50%                                 | 30%                                     | 40.00%                           | 1,154,589                               |                                           |
| Extreme heat                                                                     | 90%                                 | 70%                                     | 80.00%                           | 2,309,178                               |                                           |
| Flooding                                                                         | 0%                                  | 0%                                      | 0.00%                            | 0                                       |                                           |
| Hail                                                                             | 70%                                 | 15%                                     | 42.50%                           | 1,226,751                               |                                           |
| High winds                                                                       | 70%                                 | 25%                                     | 47.50%                           | 1,371,075                               |                                           |
| Lightning                                                                        | 50%                                 | 15%                                     | 32.50%                           | 938,104                                 |                                           |
| Tornado                                                                          | 70%                                 | 90%                                     | 80.00%                           | 2,309,178                               |                                           |
| Wildfires                                                                        | 0%                                  | 0%                                      | 0.00%                            | 0                                       |                                           |
| Winter storms                                                                    | 70%                                 | 45%                                     | 57.50%                           | 1,659,722                               |                                           |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                           |                                           |                                         | FACILITY NAME: Pioneer Pleasant Vale Jr. |                                   |
|----------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                           | 6520 East Wood Rd Enid                    |                                         | COUNTY:                                  | Garfield County                   |
|                                                                                  |                           | Latitude:                                 | 36.275125                               | Longitude:                               | -97.783607                        |
| WHY CRITICAL:                                                                    |                           |                                           |                                         |                                          |                                   |
| <input type="checkbox"/> Emergency Service                                       |                           | <input type="checkbox"/> Government       | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility         | <input type="checkbox"/> Resource |
|                                                                                  |                           | <input checked="" type="checkbox"/> Other |                                         |                                          |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                           |                                           |                                         |                                          |                                   |
| Location:                                                                        | Year built:               | Stories:                                  | Type of Construction:                   | Square Feet:                             | Vulnerability quotient            |
| Rural                                                                            | 1930                      | 1                                         | Brick/Metal                             | 90,498.00                                | 60%                               |
| SFHA NO                                                                          | Building value:           | \$7,692,330                               |                                         | Contents value:                          | \$3,846,165                       |
|                                                                                  |                           |                                           |                                         |                                          |                                   |
|                                                                                  | Probability of this risk? | Degree of Impact                          | Percent of loss                         | Value of loss                            | NOTES                             |
| Dam Failure                                                                      | 0%                        | 0%                                        | 0.00%                                   | 0                                        |                                   |
| Drought                                                                          | 80%                       | 30%                                       | 55.00%                                  | 6,346,172                                |                                   |
| Earthquake                                                                       | 50%                       | 30%                                       | 40.00%                                  | 4,615,398                                |                                   |
| Extreme heat                                                                     | 90%                       | 70%                                       | 80.00%                                  | 9,230,796                                |                                   |
| Flooding                                                                         | 0%                        | 0%                                        | 0.00%                                   | 0                                        |                                   |
| Hail                                                                             | 70%                       | 15%                                       | 42.50%                                  | 4,903,860                                |                                   |
| High winds                                                                       | 70%                       | 25%                                       | 47.50%                                  | 5,480,785                                |                                   |
| Lightning                                                                        | 50%                       | 15%                                       | 32.50%                                  | 3,750,011                                |                                   |
| Tornado                                                                          | 70%                       | 90%                                       | 80.00%                                  | 9,230,796                                |                                   |
| Wildfires                                                                        | 0%                        | 0%                                        | 0.00%                                   | 0                                        |                                   |
| Winter storms                                                                    | 70%                       | 45%                                       | 57.50%                                  | 6,634,635                                |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Pioneer Pleasant Vale HS |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 6520 East Wood RD Enid              |                                         | COUNTY:                                 | Garfield County                   |
|                                                                                  | Latitude:                                  | 36.275125                           | Longitude:                              | -97.783607                              |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                         |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility        | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                         |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                         |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                            | Vulnerability quotient            |
| Rural                                                                            | 1930                                       | 1                                   | Brick/ Metal                            | 90,498.00                               | 60%                               |
| SFHA No                                                                          | Building value:                            | \$7,692,330                         |                                         | Contents value:                         | \$3,846,165                       |
|                                                                                  |                                            |                                     |                                         |                                         |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                           | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 6,346,172                               |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 4,615,398                               |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 9,230,796                               |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 4,903,860                               |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 5,480,785                               |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 3,750,011                               |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 9,230,796                               |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                       |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 6,634,635                               |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                         |                                         |                                   |



| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: Waukomis Elementary School |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 209 West Locust                     |                                         | COUNTY:                                   | Garfield                          |
|                                                                                  | Latitude:                                  | 36.276103                           | Longitude:                              | -97.900678                                |                                   |
| WHY CRITICAL:                                                                    |                                            |                                     |                                         |                                           |                                   |
|                                                                                  | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility          | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                           |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                           |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                              | Vulnerability quotient            |
| Rural                                                                            | 1960                                       | 1                                   | Metal                                   | 36,582.00                                 | 65%                               |
| SFHA No                                                                          | Building value:                            | \$2,377,830                         |                                         | Contents value:                           | \$36,582                          |
|                                                                                  |                                            |                                     |                                         |                                           |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                             | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                         |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 1,327,927                                 |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 965,765                                   |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 1,931,530                                 |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                         |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 1,026,125                                 |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 1,146,846                                 |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 784,684                                   |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 1,931,530                                 |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                         |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 1,388,287                                 |                                   |



|                                                                                        |                                  |                                                  |                                                |                                         |                                          |
|----------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                  |                                                  |                                                | <b>FACILITY NAME:</b> Waukomis HS       |                                          |
| <b>FACILITY LOCATION:</b>                                                              |                                  | 214 Main St                                      |                                                | <b>COUNTY:</b> Garfield                 |                                          |
|                                                                                        |                                  | Latitude:                                        | 36.278367                                      | Longitude:                              | -97.898399                               |
| <b>WHY CRITICAL:</b>                                                                   |                                  |                                                  |                                                |                                         |                                          |
| <input type="checkbox"/> Emergency Service                                             |                                  | <input type="checkbox"/> <b>Government</b>       | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b> | <input type="checkbox"/> <b>Resource</b> |
|                                                                                        |                                  | <input checked="" type="checkbox"/> <b>Other</b> |                                                |                                         |                                          |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                  |                                                  |                                                |                                         |                                          |
| Location:                                                                              | Year built:                      | Stories:                                         | Type of Construction:                          | Square Feet:                            | Vulnerability quotient                   |
| Rural                                                                                  | 1977                             | 1                                                | Brick                                          | 16,000.00                               | 35%                                      |
| SFHA No                                                                                | Building value:                  | \$1,360,000                                      |                                                | Contents value:                         | \$680,000                                |
|                                                                                        |                                  |                                                  |                                                |                                         |                                          |
|                                                                                        | <b>Probability of this risk?</b> | <b>Degree of Impact</b>                          | <b>Percent of loss</b>                         | <b>Value of loss</b>                    | <b>NOTES</b>                             |
| <b>Dam Failure</b>                                                                     | 0%                               | 0%                                               | 0.00%                                          | 0                                       |                                          |
| <b>Drought</b>                                                                         | 80%                              | 30%                                              | 55.00%                                         | 1,122,000                               |                                          |
| <b>Earthquake</b>                                                                      | 50%                              | 30%                                              | 40.00%                                         | 816,000                                 |                                          |
| <b>Extreme heat</b>                                                                    | 90%                              | 70%                                              | 80.00%                                         | 1,632,000                               |                                          |
| <b>Flooding</b>                                                                        | 0%                               | 0%                                               | 0.00%                                          | 0                                       |                                          |
| <b>Hail</b>                                                                            | 70%                              | 15%                                              | 42.50%                                         | 867,000                                 |                                          |
| <b>High winds</b>                                                                      | 70%                              | 25%                                              | 47.50%                                         | 969,000                                 |                                          |
| <b>Lightning</b>                                                                       | 50%                              | 15%                                              | 32.50%                                         | 663,000                                 |                                          |
| <b>Tornado</b>                                                                         | 70%                              | 90%                                              | 80.00%                                         | 1,632,000                               |                                          |
| <b>Wildfires</b>                                                                       | 0%                               | 0%                                               | 0.00%                                          | 0                                       |                                          |
| <b>Winter storms</b>                                                                   | 70%                              | 45%                                              | 57.50%                                         | 1,173,000                               |                                          |

Hazard Mitigation Specialists, LLC





| CRITICAL FACILITY IDENTIFICATION                                                 |                                            |                                     |                                         | FACILITY NAME: O.T. Autry Vo-Tech |                                   |
|----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|-----------------------------------------|-----------------------------------|-----------------------------------|
| FACILITY LOCATION:                                                               |                                            | 1201 W. Willow Rd. Enid             |                                         | COUNTY:                           | Garfield County                   |
|                                                                                  |                                            | Latitude:                           | 36.419012                               | Longitude:                        | - 97.897362                       |
|                                                                                  |                                            |                                     |                                         |                                   |                                   |
| WHY CRITICAL:                                                                    | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input type="checkbox"/> Health Service | <input type="checkbox"/> Utility  | <input type="checkbox"/> Resource |
|                                                                                  | <input checked="" type="checkbox"/> Other  |                                     |                                         |                                   |                                   |
| ABOUT THE STRUCTURE: Vulnerability due to location, age and type of construction |                                            |                                     |                                         |                                   |                                   |
| Location:                                                                        | Year built:                                | Stories:                            | Type of Construction:                   | Square Feet:                      | Vulnerability quotient            |
| Metropolitan                                                                     | 1967                                       | 1                                   | Masonry Concrete                        | 88,924.00                         | 35%                               |
| SFHA NO                                                                          | Building value:                            | \$7,558,540                         |                                         | Contents value:                   | \$5,039,026                       |
|                                                                                  |                                            |                                     |                                         |                                   |                                   |
|                                                                                  | Probability of this risk?                  | Degree of Impact                    | Percent of loss                         | Value of loss                     | NOTES                             |
| Dam Failure                                                                      | 0%                                         | 0%                                  | 0.00%                                   | 0                                 |                                   |
| Drought                                                                          | 80%                                        | 30%                                 | 55.00%                                  | 6,928,661                         |                                   |
| Earthquake                                                                       | 50%                                        | 30%                                 | 40.00%                                  | 5,039,026                         |                                   |
| Extreme heat                                                                     | 90%                                        | 70%                                 | 80.00%                                  | 10,078,053                        |                                   |
| Flooding                                                                         | 0%                                         | 0%                                  | 0.00%                                   | 0                                 |                                   |
| Hail                                                                             | 70%                                        | 15%                                 | 42.50%                                  | 5,353,966                         |                                   |
| High winds                                                                       | 70%                                        | 25%                                 | 47.50%                                  | 5,983,844                         |                                   |
| Lightning                                                                        | 50%                                        | 15%                                 | 32.50%                                  | 4,094,209                         |                                   |
| Tornado                                                                          | 70%                                        | 90%                                 | 80.00%                                  | 10,078,053                        |                                   |
| Wildfires                                                                        | 0%                                         | 0%                                  | 0.00%                                   | 0                                 |                                   |
| Winter storms                                                                    | 70%                                        | 45%                                 | 57.50%                                  | 7,243,600                         |                                   |
| Hazard Mitigation Specialists, LLC                                               |                                            |                                     |                                         |                                   |                                   |



|                                                                                        |                                            |                                            |                                                |                                                              |                                                                                           |
|----------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                            |                                            |                                                | <b>FACILITY NAME:</b> Northwestern Oklahoma State University |                                                                                           |
| <b>FACILITY LOCATION:</b>                                                              |                                            | 2929 E. Randolph Ave Enid                  |                                                | <b>COUNTY:</b> Garfield County                               |                                                                                           |
|                                                                                        |                                            | Latitude:                                  | 36.397332                                      | Longitude:                                                   | - 97.837669                                                                               |
|                                                                                        |                                            |                                            |                                                |                                                              |                                                                                           |
| <b>WHY CRITICAL:</b>                                                                   | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> <b>Government</b> | <input type="checkbox"/> <b>Health Service</b> | <input type="checkbox"/> <b>Utility</b>                      | <input type="checkbox"/> <b>Resource</b> <input checked="" type="checkbox"/> <b>Other</b> |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                            |                                            |                                                |                                                              |                                                                                           |
| Location:                                                                              | Year built:                                | Stories:                                   | Type of Construction:                          | Square Feet:                                                 | Vulnerability quotient                                                                    |
| <b>Metropolitan</b>                                                                    | 1990                                       | 2                                          | Brick/Metal                                    | 42,000.00                                                    | 20%                                                                                       |
| SFHA NO                                                                                | Building value:                            | \$3,570,000                                |                                                | Contents value:                                              | \$1,785,000                                                                               |
|                                                                                        |                                            |                                            |                                                |                                                              |                                                                                           |
|                                                                                        | <b>Probability of this risk?</b>           | <b>Degree of Impact</b>                    | <b>Percent of loss</b>                         | <b>Value of loss</b>                                         | <b>NOTES</b>                                                                              |
| <b>Dam Failure</b>                                                                     | 0%                                         | 0%                                         | 0.00%                                          | 0                                                            |                                                                                           |
| <b>Drought</b>                                                                         | 80%                                        | 30%                                        | 55.00%                                         | 2,945,250                                                    |                                                                                           |
| <b>Earthquake</b>                                                                      | 50%                                        | 30%                                        | 40.00%                                         | 2,142,000                                                    |                                                                                           |
| <b>Extreme heat</b>                                                                    | 90%                                        | 70%                                        | 80.00%                                         | 4,284,000                                                    |                                                                                           |
| <b>Flooding</b>                                                                        | 0%                                         | 0%                                         | 0.00%                                          | 0                                                            |                                                                                           |
| <b>Hail</b>                                                                            | 70%                                        | 15%                                        | 42.50%                                         | 2,275,875                                                    |                                                                                           |
| <b>High winds</b>                                                                      | 70%                                        | 25%                                        | 47.50%                                         | 2,543,625                                                    |                                                                                           |
| <b>Lightning</b>                                                                       | 50%                                        | 15%                                        | 32.50%                                         | 1,740,375                                                    |                                                                                           |
| <b>Tornado</b>                                                                         | 70%                                        | 90%                                        | 80.00%                                         | 4,284,000                                                    |                                                                                           |
| <b>Wildfires</b>                                                                       | 0%                                         | 0%                                         | 0.00%                                          | 0                                                            |                                                                                           |
| <b>Winter storms</b>                                                                   | 70%                                        | 45%                                        | 57.50%                                         | 3,079,125                                                    |                                                                                           |
| Hazard Mitigation Specialists, LLC                                                     |                                            |                                            |                                                |                                                              |                                                                                           |

|                                                                                        |                                            |                                     |                                                    |                                                          |                                   |                                |
|----------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------|----------------------------------------------------|----------------------------------------------------------|-----------------------------------|--------------------------------|
| <b>CRITICAL FACILITY IDENTIFICATION</b>                                                |                                            |                                     |                                                    | <b>FACILITY NAME:</b> St. Mary's Regional Medical Center |                                   |                                |
| <b>FACILITY LOCATION:</b> 305 South 5th Street Enid Ok                                 |                                            | <b>COUNTY:</b> Garfield             |                                                    |                                                          |                                   |                                |
| Latitude: 36.393855                                                                    |                                            | Longitude: -97.87094                |                                                    |                                                          |                                   |                                |
|                                                                                        |                                            |                                     |                                                    |                                                          |                                   |                                |
| <b>WHY CRITICAL:</b>                                                                   | <input type="checkbox"/> Emergency Service | <input type="checkbox"/> Government | <input checked="" type="checkbox"/> Health Service | <input type="checkbox"/> Utility                         | <input type="checkbox"/> Resource | <input type="checkbox"/> Other |
| <b>ABOUT THE STRUCTURE</b> Vulnerability due to location, age and type of construction |                                            |                                     |                                                    |                                                          |                                   |                                |
| Location:                                                                              | Year built:                                | Stories:                            | Type of Construction:                              | Square Feet:                                             | Vulnerability quotient            |                                |
| Metropolitan                                                                           | 1980                                       | 5                                   | Masonry concrete                                   | 119,405.00                                               | 20%                               |                                |
| SFHA Yes                                                                               | Building value:                            | \$9,552,400                         |                                                    | Contents value:                                          | \$19,104,800                      |                                |
|                                                                                        |                                            |                                     |                                                    |                                                          |                                   |                                |
|                                                                                        | <b>Probability of this risk?</b>           | <b>Degree of Impact</b>             | <b>Percent of loss</b>                             | <b>Value of loss</b>                                     | <b>NOTES</b>                      |                                |
| Dam Failure                                                                            | 0%                                         | 0%                                  | 0.00%                                              | 0                                                        |                                   |                                |
| Drought                                                                                | 80%                                        | 30%                                 | 55.00%                                             | 15,761,460                                               |                                   |                                |
| Earthquake                                                                             | 50%                                        | 30%                                 | 40.00%                                             | 11,462,880                                               |                                   |                                |
| Extreme heat                                                                           | 90%                                        | 70%                                 | 80.00%                                             | 22,925,760                                               |                                   |                                |
| Flooding                                                                               | 0%                                         | 0%                                  | 0.00%                                              | 0                                                        |                                   |                                |
| Hail                                                                                   | 70%                                        | 15%                                 | 42.50%                                             | 12,179,310                                               |                                   |                                |
| High winds                                                                             | 70%                                        | 25%                                 | 47.50%                                             | 13,612,170                                               |                                   |                                |
| Lightning                                                                              | 50%                                        | 15%                                 | 32.50%                                             | 9,313,590                                                |                                   |                                |
| Tornado                                                                                | 70%                                        | 90%                                 | 80.00%                                             | 22,925,760                                               |                                   |                                |
| Wildfires                                                                              | 0%                                         | 0%                                  | 0.00%                                              | 0                                                        |                                   |                                |
| Winter storms                                                                          | 70%                                        | 45%                                 | 57.50%                                             | 16,477,890                                               |                                   |                                |
| Hazard Mitigation Specialists, LLC                                                     |                                            |                                     |                                                    |                                                          |                                   |                                |