



2022 Ada County Multi-Hazard Mitigation Plan

Public Review Draft | July 2022



Volume 2
Planning Partner
Annexes



TETRA TECH

2022 Ada County Multi-Hazard Mitigation Plan

Volume 2—Planning Partner Annexes

July 2022

PREPARED FOR

Ada County Emergency Management & Community Resilience

7200 Barrister Drive Phone: 208-577-4750
Boise ID 83704-9293 www.adacounty.id.gov/emergencymanagement

PREPARED BY

Tetra Tech

90 South Blackwood Avenue Phone: 208.939.4391
Eagle, ID 83616 Fax: 208.939.4402
tetrattech.com

Tetra Tech Project #103S7664

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Appendix A. Annex Instructions and Templates

INTRODUCTION

BACKGROUND

A multi-jurisdictional approach to hazard mitigation planning is an efficient way for numerous jurisdictions to meet the requirements of the federal Disaster Mitigation Act (DMA). The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional hazard mitigation planning. To fully meet the DMA requirements, participating jurisdictions must participate in the hazard mitigation planning process and officially adopt the completed and approved plan (44 CFR Section 201.6.a(4)).

For the *2022 Ada County Multi-Hazard Mitigation Plan*, a planning partnership was formed to meet DMA requirements for eligible local governments in Ada County. The DMA defines a local government as follows:

“Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.”

Two types of planning partners participated in this process:

- Municipalities and the County
- Special purpose districts.

Each participating planning partner has prepared a jurisdiction-specific annex to this plan. This volume of the *2022 Ada County Multi-Hazard Mitigation Plan* presents these annexes, along with information on the process by which they were created.

THE PLANNING PARTNERSHIP

Initial Solicitation and Letters of Intent

The planning team solicited the participation of the County and all County-recognized special purpose districts at the outset of this project. A kickoff meeting was conducted by the core planning team on June 24, 2021, where a presentation was made to introduce the mitigation plan update and solicit planning partner commitment to the plan update process. All eligible local governments within the planning area were invited to attend. Various agency and citizen stakeholders were also invited to this meeting. The goals of the meeting were as follows:

- Provide an overview of the Disaster Mitigation Act.

- Provide an update on the planning process to date.
- Outline the Ada County plan update work plan.
- Describe the benefits of multi-jurisdictional planning.
- Outline planning partner expectations.
- Solicit planning partners.

All interested local governments were provided with a list of planning partner expectations developed by the planning team and were informed of the obligations required for participation. Local governments wishing to join the planning effort were asked to provide the planning team with a “notice of intent to participate” that agreed to the planning partner expectations as described in the section below and designated a point of contact for their jurisdiction. In all, formal commitment was received from 21 planning partners by the planning team, and the Ada County Planning Partnership was formed. The letters of intent to participate are on file with Ada County Emergency Management & Community Resilience (EMCR) and are available for review upon request.

Maps showing the location of participating special purpose districts are provided at the end of this introduction. Maps of local hazards for participating cities are provided in each city’s individual annex. Overall maps for Ada County are included in Volume 1 of this plan.

Planning Partner Expectations

The planning team developed the following list of planning partner expectations, which were confirmed at the kickoff meeting:

- Provide a “Letter of Intent to Participate.”
- Support and participate in the selection and function of the Steering Committee overseeing the development of the update. Support includes allowing this body to make decisions regarding plan development and scope on behalf of the partnership.
- Provide support for the public involvement strategy developed by the Steering Committee in the form of mailing lists, possible meeting space, and media outreach such as newsletters, newspapers or direct-mailed brochures.
- Participate in plan update development activities such as:
 - Steering Committee meetings
 - Public meetings or open houses
 - Workshops and planning partner training sessions
 - Public review and comment periods prior to adoption.

Attendance will be tracked at such activities, and attendance records will be used to track and document participation for each planning partner. No minimum level of participation will be established, but each planning partner should attempt to attend all such activities.

- Perform a “consistency review” of all technical studies, plans, and ordinances specific to hazards identified within the planning area to determine the existence of plans, studies or ordinances not consistent with the equivalent documents reviewed in preparation of the County plan. For example: if a planning partner has a floodplain management plan that makes recommendations that are not consistent with any of the County’s basin plans, that plan will need to be reviewed for probable incorporation into the plan for the partner’s area.

- Review the risk assessment and identify hazards and vulnerabilities specific to the local jurisdiction. Resources will be provided for jurisdiction-specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.
- Review the mitigation recommendations chosen for the overall county and determine if they meet the needs of the jurisdiction. Projects within each jurisdiction consistent with the overall plan recommendations will need to be identified, prioritized and reviewed to determine their benefits and costs.
- Create an action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.
- Complete the normal pre-adoption process prior to submitting the plan to the local governing body for adoption. For example, if it is the community's normal process to submit a planning document to a Planning Commission prior to submittal to council for adoption, then that process must be followed for the adoption of this plan.
- Agree to the plan implementation and maintenance protocol established in Volume 1
- Formally adopt the plan.

Failure to meet these criteria could result in a partner being dropped from the partnership by the Steering Committee, and thus losing eligibility under the scope of this plan.

ANNEX-PREPARATION PROCESS

Templates

Templates were created to help the planning partners prepare their jurisdiction-specific annexes. Since special purpose districts operate differently from incorporated municipalities, separate templates were created for the two types of jurisdictions. The templates were created so that all criteria of Section 201.6 of 44 CFR would be met, based on the partners' capabilities and mode of operation. Templates available for the planning partners' use were specific as to whether the partner is a municipality or a special purpose district and whether the annex is an update to a previous hazard mitigation plan or a first-time hazard plan. Each partner was asked to participate in a technical assistance workshop during which key elements of the template were completed by a designated point of contact for each partner and a member of the planning team. The templates were set up to lead each partner through a series of steps that would generate the DMA-required elements that are specific for each partner. The templates and their instructions can be found in Appendix A to this volume of the Multi-Hazard Mitigation Plan.

Risk Ranking

Each planning partner was asked to rank each risk specifically for its jurisdiction, based on the impact on its population or facilities. Cities were asked to base this ranking on probability of occurrence and the potential impact on people, property and the economy. Special purpose districts were asked to base this ranking on probability of occurrence and the potential impact on their constituency, their vital facilities and the facilities' functionality after an event. The methodology followed that used for the countywide risk ranking presented in Volume 1. A principal objective of this exercise was to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes. Tools utilized for the ranking included the following:

- The risk assessment results developed for this plan
- Hazard maps for all hazards of concern
- Special district boundary maps that illustrated the sphere of influence for each special purpose district partner
- Hazard mitigation catalogs
- Federal funding and technical assistance catalogs
- Copies of partners' prior annexes, if applicable.

Prioritization

44 CFR requires actions identified in the action plan to be prioritized (Section 201.c.3.iii). The planning team and steering committee developed a methodology for prioritizing the action plans that meets the needs of the partnership and the requirements of 44 CFR. The actions were prioritized for implementation according to the following criteria:

- **High Priority**—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
- **Medium Priority**—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years) once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
- **Low Priority**—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known grant funding. Action can be completed in the long term (1 to 10 years). Low-priority actions are generally “wish-list” actions. They may be eligible for grant funding from programs that have not yet been identified.

The actions were prioritized for grant-funding pursuit according to the following criteria:

- **High Priority**—An action that meets identified grant eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible for grant funding.
- **Medium Priority**—An action that meets identified grant eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
- **Low Priority**—An action that has not been identified as meeting any grant eligibility requirements.

Benefit/Cost Review

44 CFR requires the prioritization of the action plan to emphasize a benefit/cost analysis of the proposed actions. Because some actions may not be implemented for up to 10 years, benefit/cost analysis was qualitative and not of the detail required by FEMA for project grant eligibility under relevant grant programs. A review of the apparent benefits versus the apparent cost of each project was performed. Parameters were established for assigning subjective ratings (high, medium, and low) to costs and benefits as follows:

Benefit ratings were defined as follows:

- **High**—Action will have an immediate impact on the reduction of risk exposure to life and property.
- **Medium**—Action will have a long-term impact on the reduction of risk exposure to life and property, or action will provide an immediate reduction in the risk exposure to property.
- **Low**—Long-term benefits of the action are difficult to quantify in the short term.

Cost ratings were defined as follows:

- **High**—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
- **Medium**—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
- **Low**—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.

Using this approach, actions with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial. For many of the strategies identified in this action plan, the partners may seek financial assistance under federal funding programs that require detailed benefit/cost analyses. These analyses will be performed on actions at the time of application using appropriate benefit-cost models. For actions not seeking financial assistance from grant programs that require detailed analysis, the partners reserve the right to define “benefits” according to parameters that meet the goals and objectives of this plan.

Analysis of Mitigation Initiatives

Each planning partner reviewed its recommended initiatives to classify each initiative based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this categorization are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.

- **Climate Resiliency**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

FINAL COVERAGE UNDER THE PLAN

All planning partners whose annexes are included in this volume of the Ada County Hazard Mitigation Plan fully met the participation requirements specified by the Steering Committee, and will seek DMA compliance under this plan.

ACRONYMS AND ABBREVIATIONS

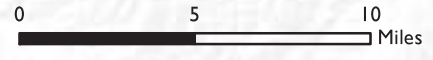
The following terms are used in the planning partner annexes:

- ACC—Ada County Code
- ACEMSD—Ada County Emergency Medical Services District
- ACHD—Ada County Highway District
- CFM—Certified Floodplain Manager
- COMPASS—Community Planning Association of Southwest Idaho
- CWPP—Community Wildfire Protection Plan
- EFD—Eagle Fire District
- EOP—Emergency Operations Plan
- EMCR—Ada County Emergency Management & Community Resilience
- EPA—Environmental Protection Agency
- ESD—Eagle Sewer District
- FCD—Flood Control District
- FEMA—Federal Emergency Management Agency
- FMA—Flood Mitigation Assistance
- GBAD—Greater Boise Auditorium District
- HMGP—Hazard Mitigation Grant Program
- HOA—Homeowners Association
- IPAWS—Integrated Public Alert & Warning System
- ISAWS—Idaho State Alert & Warning System
- ICC—International Code Council

- IDWR—Idaho Department of Water Resources
- ITD—Idaho Transportation Department
- KMC—Kuna Municipal Code
- KRFD—Kuna Rural Fire Protection District
- NACFR—North Ada County Fire & Rescue
- NFIP—National Flood Insurance Program
- NOAA—National Oceanic and Atmospheric Administration
- NPDES—National Pollutant Discharge Elimination System
- SCADA—Supervisory Control and Data Acquisition
- SFD—Star Joint Fire Protection District
- USGS—U.S. Geological Survey
- WFPD—Whitney Fire Protection District
- WUI—Wildland Urban Interface
- WWTP—Wastewater Treatment Plan

Ada County

General Planning Area

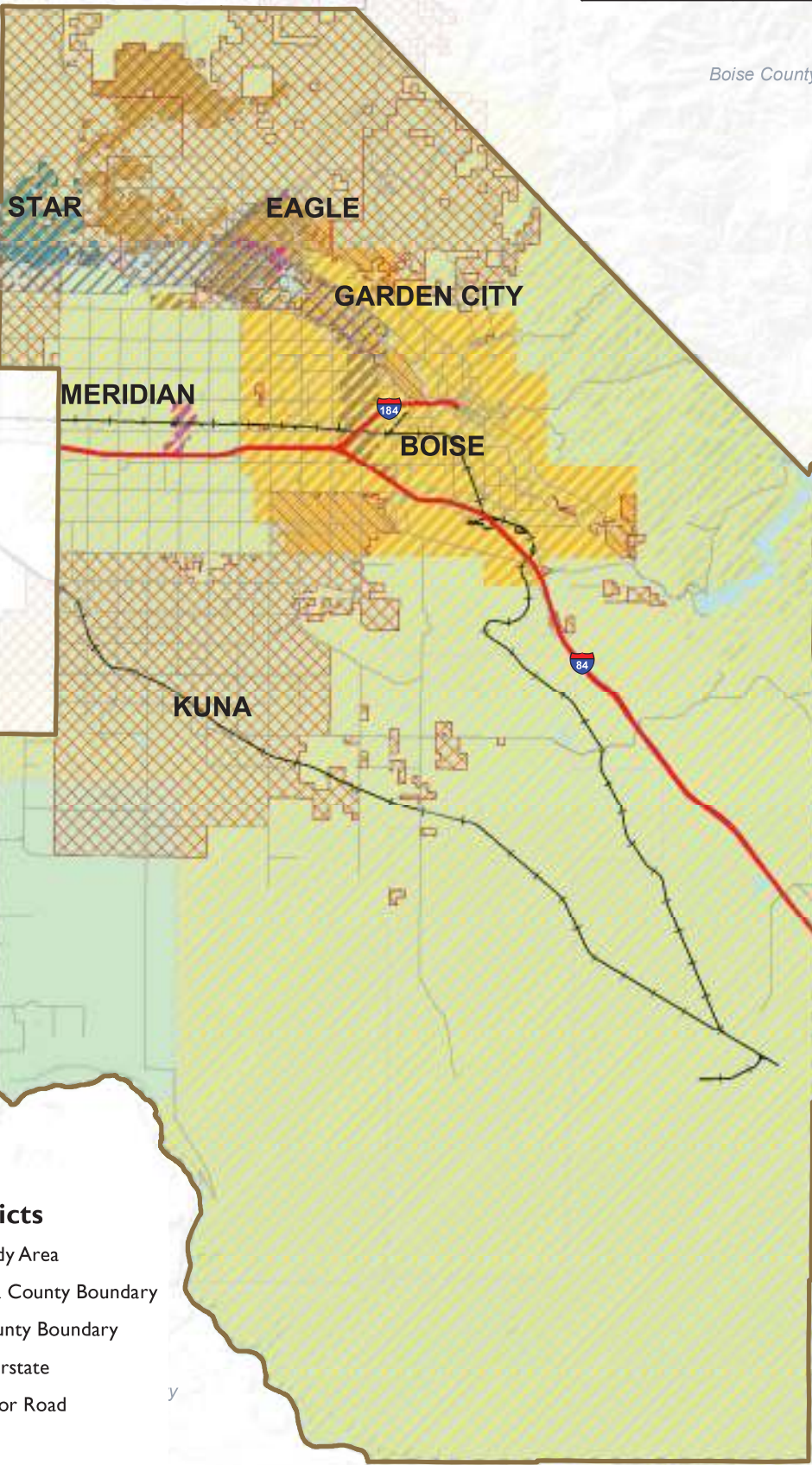


Gem County

Boise County

Canyon County

Elmore County



Special Purpose Districts

- | | | | |
|--|---------------|--|---------------------|
| | Flood Control | | Study Area |
| | Fire | | Ada County Boundary |
| | School | | County Boundary |
| | Urban Renewal | | Interstate |
| | Sewer | | Major Road |
| | Auditorium | | Rail |
| | Sewer Water | | Waterbody |
| | Highway | | |

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



1. UNINCORPORATED ADA COUNTY

1.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Paul “Crash” Marusich, Deputy Director
Ada County Emergency Management and Community Resilience (EMCR)
7200 Barrister Dr.
Boise, ID 83704
Telephone: 208-577-4750
e-mail Address: pmarusich@adacounty.id.gov

Alternate Point of Contact

Joe Lombardo, Director
Ada County Emergency Management and Community Resilience (EMCR)
7200 Barrister Dr.
Boise, ID 83704
Telephone: 208-577-4750
e-mail Address: jlombardo@adacounty.id.gov

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Hazard Mitigation Planning Team Members

Name	Title
Paul “Crash” Marusich	Deputy Director, EMCR
Stacey Yarrington	Community and Regional Planner, Ada County
Zach Kirk	Ada County Engineer/Floodplain Administrator

1.2 JURISDICTION PROFILE

1.2.1 Location and Features

Ada County is located in the southwestern part of Idaho and encompasses a land area of 1,060 square miles (including 5 miles of water). Ada County is the State of Idaho’s most populated county, containing nearly 27% of the state’s population. It is home to the capital city of Boise, which is also the largest city and the county seat where most of the county offices are located. In addition, the county is home to five other cities, Meridian, Eagle, Garden City, Star, and Kuna. Ada County is also home to the nation’s only countywide highway district, the Ada County Highway District (ACHD) which is served by a separate elected board. Surrounding counties are Boise (northeast), Canyon (west), Elmore (southeast), Gem (north), and Owyhee (southwest) as shown in Figure 1-1.

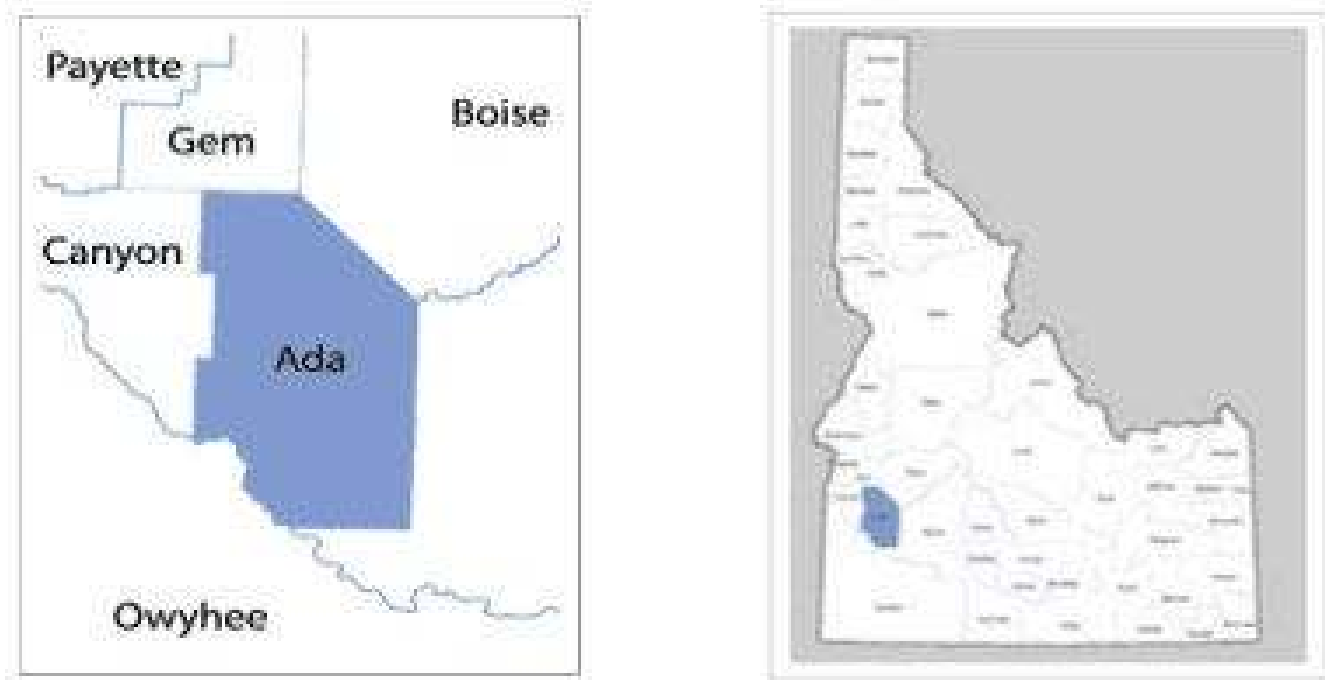


Figure 1-1. Ada County and Surroundings

The following highways run through Ada County: Interstate Highway 84/184, US 20, US 26, US 30, State Highway 21, State Highway 44, State Highway 55, and State Highway 69.

Major dams on the Boise River in Ada County include Lucky Peak and Arrow Rock Reservoir. Additionally, Anderson Ranch dam is another large dam that lies in Elmore County, up river of Ada County's Lucky Peak Reservoir. Ada County has a number of smaller dams as well, including Barber dam—located on the Boise River just below Lucky Peak. There are a total of 26 dams in the county, 13 of which are classified as high-hazard dams. More information on dams is available via Ada County's Emergency Management site at www.adaprepere.id.gov.

Key geographic features include the Boise River, which flows through the northern part of the county and the City of Boise. The northeastern part of Ada County is bordered by the foothills of the Boise Mountains (the foothills of the Rocky Mountains). The southwestern part of Ada County borders the Snake River.

Ada County is also home to the Boise Airport (Gowen Field), Gowen Field Air National Guard Base, and Boise State University—the state's largest university with over 20,000 students, which lies within the City of Boise.

Ada County's high desert semi-arid climate produces cold winters and hot and dry summers. January is the coldest month with average low temperatures in the low to mid 20s. July is the hottest month with average high temperatures peaking in the low to mid 90s. Average precipitation in Ada County is 12 inches per year, with most of the precipitation occurring during the cooler months and falling as snow at times. Very little precipitation falls during the summer months, though thunderstorms occasionally produce brief cloud bursts of rain.

1.2.2 History

Ada County was created by the Idaho Territorial Legislature on December 22, 1864. It is named after Ada Riggs, the first pioneer child born in the county, and daughter of H.C. Riggs, the co-founder of the City of Boise.

1.2.3 Governing Body Format

Ada County is headed by an elected three-member group, the Board of County Commissioners. The Board oversees departments both directly and through the County's Chief Operating Officer. Other county elected offices include a County Clerk, Treasurer, Assessor, Prosecutor, Coroner, and Sheriff.

The Board of County Commissioners is responsible for the adoption of this plan, Ada County Emergency Management and Community Resilience is responsible for its implementation.

1.3 CURRENT TRENDS

1.3.1 Population

According to COMPASS, the population of Unincorporated Ada County as of April 2022, was 66,240. Since 2017, the population has grown at an average annual rate of 2.2 percent.

1.3.2 Development

Ada County has scene unprecedented growth over the last several years. Development is once again at an all-time high, with no sign of a slowing economy. Ada County has grown in population by approximately 22.7% between 2010 and 2020 according to the U.S. Census. In 2020, Ada County issued 543 residential and 52 commercial building permits within unincorporated parts of the county. Ada County has 4 approved Planned Communities and interest is once again growing to create more Planned Communities within the unincorporated areas of the county.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 1-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 1-2. Recent and Expected Future Development Trends

Criterion	Response																														
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	No																														
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i>	No																														
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	Yes A proposed PC located east of Kuna and south of Boise consisting of approximately 2,200 lots on approximately 750-acres. This proposed development is located within a WUI zone and has a Zone A Flood Plain thru a small portion of the site. A potential PC located east of Eagle and north of Boise consisting of approximately 250 lots on approximately 400-acres that surrounds an existing golf course. This proposed development is located within a WUI zone.																														
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Single Family</td> <td>496</td> <td>520</td> <td>444</td> <td>553</td> <td>526</td> </tr> <tr> <td>Multi-Family</td> <td>0</td> <td>3</td> <td>1</td> <td>0</td> <td>9</td> </tr> <tr> <td>Other</td> <td>253</td> <td>199</td> <td>274</td> <td>224</td> <td>227</td> </tr> <tr> <td>Total</td> <td>749</td> <td>722</td> <td>719</td> <td>777</td> <td>762</td> </tr> </tbody> </table>		2016	2017	2018	2019	2020	Single Family	496	520	444	553	526	Multi-Family	0	3	1	0	9	Other	253	199	274	224	227	Total	749	722	719	777	762
	2016	2017	2018	2019	2020																										
Single Family	496	520	444	553	526																										
Multi-Family	0	3	1	0	9																										
Other	253	199	274	224	227																										
Total	749	722	719	777	762																										
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> Special Flood Hazard Areas: 140 Landslide: 0 Wildfire Risk Areas: 1,494 																														
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	There are four approved Planned Communities (PCs) within Ada County with a total of over 4,300 residential lots approved. Build-out is at approximately 51%, with over 2,200 building permits issued between the PCs. The majority of the new-construction permits that are listed in the Wildfire Risk area above, are located within the PCs.																														

1.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 1-3.
- Development and permitting capabilities are presented in Table 1-4.
- An assessment of fiscal capabilities is presented in Table 1-5.
- An assessment of administrative and technical capabilities is presented in Table 1-6.
- An assessment of education and outreach capabilities is presented in Table 1-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-8.
- Classifications under various community mitigation programs are presented in Table 1-9.

Table 1-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code <i>Comment: Title 7, Chapter 2, Ada County Code adopts the 2018 IBC, 02/16/2021</i>	Yes	No	Yes	Yes
Zoning Code <i>Comment: Title 8, ACC adopted with amendments: 7-21-2021</i>	Yes	No	No	Yes
Subdivisions <i>Comment: Title 8, ACC adopted with amendments: 7-21-2021</i>	Yes	No	No	Yes
Stormwater Management <i>Comment: Title 8, Chapter 4, ACC adopted: 12/8/2010</i>	Yes	No	Yes	Yes
Post-Disaster Recovery <i>Comment: Ordinance 914-Flood Hazard Overlay District-6-10-2020</i>	Yes	Yes	Yes	Yes
Real Estate Disclosure <i>Comment: Realtor Listing Disclosure Page shows if flood insurance is required.</i>	Yes	No	No	No
Growth Management <i>Comment: Ada County Comprehensive Plan, adopted November 2016; Ada Co. Zoning ordinance-Title 8, ACC, adopted with amendments on 7-21-2021</i>	Yes	No	No	Yes
Site Plan Review <i>Comment: Title 8, Chapter 4-ACC adopted: 12/8/2010</i>	Yes	No	No	Yes
Environmental Protection <i>Comment: Title 8, Article A-ACC adopted: 6-14-2000</i>	Yes	Yes	Yes	Yes
Flood Damage Prevention <i>Comment: Title 8, Chapter 3-ACC, Article F adopted 6-10-2020</i>	Yes	Yes	No	Yes
Emergency Management <i>Comment: Idaho Code § 46-1009</i>	Yes	No	Yes	Yes
Climate Change <i>Comment:</i>	No	No	No	No
Other <i>Comment: Flood Hazard Overlay District: Title 8, Chapter 3, article F, ACC, adopted: 6-10-2020 Wildland Urban Interface Overlay District: Title 8, Chapter 3, Article B, ACC, adopted: 6-14-2000 Southwest Planning Area Overlay District: Title 8, Chapter 3, article C, ACC adopted: 6-18-2008 Boise River Greenway Overlay District. Title 8, Chapter 3, article G, ACC, adopted: 6/14/2000 Hillside Overlay District. Title 8, Chapter 3, article H, ACC. Adopted: 12/8/2010 Cartwright Ranch Planned Community Zoning Ordinance, Title 8, Chapter 3, article K, ACC. Adopted: 2/10/2010 Dry Creek Planned Community Zoning Ordinance. Title 8, Chapter 3, article n, ACC. Adopted: 2/10/2010 Hidden Springs Zoning Ordinance & Specific Plan. Title 8, Ch. 21. Adopted: 3/12/1997 Private Roads. Title 8, Ch. 4, Article D, ACC. Adopted 10-2-2019</i>	Yes	No	No	Yes
Planning Documents				
General Plan <i>Is the plan equipped to provide linkage to this mitigation plan? Yes</i> <i>Comment: Ada County Comprehensive Plan, adopted 11/26/2007 Comprehensive Plan updated November 2016</i>	Yes	No	No	Yes
Capital Improvement Plan <i>How often is the plan updated? 4-year performance period, reviewed and updated annually</i> <i>Comment: ACHD 8-19-2020, Ada County CIP Plan updated annually.</i>	Yes	No	No	Yes

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Disaster Debris Management Plan <i>Comment:</i> : Recently developed Debris Management Annex is awaiting adoption as part of the community EOPs	Yes	No	No	Yes
Floodplain or Watershed Plan <i>Comment:</i> The 2022 Ada County Multi-Hazard Mitigation Plan will qualify as a flood hazard management plan under CRS criteria upon its completion and adoption.	Yes	No	No	Yes
Stormwater Plan <i>Comment:</i> EPA NPDES Municipal Separate Storm Sewer System Permit; Ada County Highway District-2-1-2021	Yes	No	No	Yes
Urban Water Management Plan <i>Comment:</i> Idaho Catalog of Stormwater Best Management Practices; April 2020	Yes	Yes	No	Yes
Habitat Conservation Plan <i>Comment:</i> Boise River Greenway Overlay District; 6-14-2020	Yes	Yes	No	Yes
Economic Development Plan <i>Comment:</i> Ada County 2025 Comp Plan; Pages 51-53	Yes	No	No	Yes
Shoreline Management Plan <i>Comment:</i>	No	No	No	No
Community Wildfire Protection Plan <i>Comment:</i> Mitigation Plan will serve as CWPP as approved by the Idaho Department of Lands ACC Title 8, Article 8; Wildland-Urban Fire Interface Overlay District-6-18-2008	Yes	No	No	Yes
Forest Management Plan <i>Comment:</i>	No	No	No	No
Climate Action Plan <i>Comment:</i> The 2022 Ada County Multi-Hazard Mitigation Plan will qualify as a flood hazard management plan under CRS criteria upon its completion and adoption.	Yes	No	No	Yes
Comprehensive Emergency Management Plan <i>Comment:</i> Ada County EOP (2018) and hazard specific plans fulfill this function .	Yes	No	Yes	Yes
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment:</i> Ada County THIRA 2018, Ada County Multi-Hazard Mitigation Plan	Yes	No	No	Yes
Post-Disaster Recovery Plan <i>Comment:</i>	No	No	No	No
Continuity of Operations Plan <i>Comment:</i> Ada County COOP Plan; updated 2016	Yes	No	No	Yes
Public Health Plan <i>Comment:</i> Central District Health Department Emergency Operations Plan, 2020	No	Yes	No	Yes
Other <i>Comment:</i>	No	No	No	Yes

Table 1-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i>	Yes Ada County Development Services
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	No

Table 1-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify:</i> Sewer=yes; Water=no; gas or electric=no	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	None
<i>If yes, specify:</i>	

Table 1-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Development Services/Planning & Zoning	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Development Services/Building Division	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Development Services/Engineering Division	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Ability to contract for service	Yes
Surveyors <i>If Yes, Department /Position:</i> Development Services/Engineering Division	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Information Technology/GIS Info System Tech	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Planning partners available through universities and Idaho Office of Emergency Management	Yes
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management and Community Resilience (EMCR)	Yes
Grant writers <i>If Yes, Department /Position:</i> Ability to contract for service	Yes
Other <i>If Yes, Department /Position:</i>	No

Table 1-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Information regarding current and past hazard mitigation planning initiatives is easily accessible on the website.	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Current Emergency Management Next Door, Facebook and Twitter accounts used for general EM education and outreach. Ability to post mitigation-specific information.	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> There is citizen representation on the Hazard Mitigation Steering Committee. Mitigation updates and initiatives are also discussed at the Ada City-County Emergency Management Executive Council and the Local Emergency Planning Committee meetings.	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> EMCR conducts regular outreach through social media, website, public presentations, safety/preparedness events and public school programs.	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red– residents may sign up to receive emergency notifications and critical community alerts. System is IPAWS enabled and may additionally access that integrated system for public warnings. Ada County Emergency Management and Community Resilience developed a Joint Information System Plan that delineates the processes with developing a regional joint information system and center for coordinating public information messaging.	Yes

Table 1-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Development Services/Engineering Division
Who is your floodplain administrator? (department/position)	Director or appointee - Development Services (per flood ordinance)
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	06/10/2020
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> 1.5-foot freeboard	Exceed
When was the most recent Community Assistance Visit or Community Assistance Contact?	02/12/2021
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i>	No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i>	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i> Remaining Zone A hazard areas in Unincorporated Ada County require additional analysis.	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> Funding for CFM ongoing training.	Yes

Criterion	Response
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> Yes <i>If no, is your jurisdiction interested in joining the CRS program?</i>	Yes
How many flood insurance policies are in force in your jurisdiction? <i>What is the insurance in force?</i> \$50,709,700 <i>What is the premium in force?</i> \$126,034	170
How many total loss claims have been filed in your jurisdiction? ^a <i>What were the total payments for losses?</i> \$134,106	32

a. According to FEMA Regional Flood Insurance Liaison, Region 10 as of April 21, 2022

Table 1-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code (INCITS 31-2009)	Yes	16001	2009
DUNS #	No	NA	NA
Community Rating System	Yes	7	02/12/2021
Building Code Effectiveness Grading Schedule (Idaho Not Listed in the 2019 Report)	No	NA	NA
Public Protection	See Fire District Planning Partner Annex		
Storm Ready	Yes	Gold	N/A
Firewise	Wilderness Ranch		2002
	Avimor		2007
	Hidden Springs		2009
	Central Foothills Neighborhood Association		2010
	Warm Springs Mesa		2010
	Morningside Heights HOA		2012
	Briar Hill		2012
	Columbia Village		2013
	Boise Heights		2018
	Cartwright Ranch		2021
	Dry Creek Ranch		2021
	East Valley Neighborhood		2021
Highlands Nines HOA		2021	

1.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

1.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Ada County Comprehensive Plan**—The Comprehensive Plan for Ada County currently includes mitigation related policies as they related to the protection of human life and property from flood events. Additionally, the Comprehensive plan addresses the need for natural resource protection and the identification of known hazards within the County.
- Hazard Analysis developed for the Mitigation Plan is used to inform the Threat Hazard Inventory and Risk Assessment (THIRA). The THIRA includes gap analysis that ties response, mitigation and recovery capabilities together to help create a comprehensive approach to the hazards of concern.
- Hazard Analysis developed for the Mitigation Plan is used to inform the Hazard Specific Response Plans (Flood, Wildfire) within the County.

1.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Future planning efforts and updates to County plans will incorporate the data and analysis contained in the Mitigation Plan and the THIRA.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

1.6 RISK ASSESSMENT

1.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 1-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 1-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Funnel Cloud	N/A	10/25/2021	Strong winds, heavy rain, localized flooding
Heavy Rain/Flash Flooding	N/A	08/01/2021	Extensive precipitation and localized flooding
Thunderstorm/Microburst	N/A	6/22/2021	Wind Gusts 59 mph
Thunderstorm/Severe Winds	N/A	5/01/2021	Wind Gusts to 62 mph, small hail
High Winds	N/A	3/29/2021	Wind Gusts to 60 mph
High Winds	N/A	2/26/2021	Wind Gusts to 50-59 mph
Thunderstorm/Severe Winds	N/A	5/30/2020	Downed trees, powerlines, fences

Type of Event	FEMA Disaster #	Date	Damage Assessment
High Winds	N/A	5/06/2020	Wind Gusts to 59 mph, dust storms
Thunderstorm/Flash Flooding	N/A	4/30/2020	Street flooding caused road closures
Thunderstorm/Severe Winds	N/A	10/19/2019	Downed trees, powerlines, fences
Thunderstorm/Microburst	N/A	9/05/2019	Wind Gusts 80 mph downed trees
Funnel Cloud	N/A	5/20/2019	Strong showers, thunderstorms, localized flooding
Thunderstorms/Severe Winds	N/A	8/24 & 8/30/2017	Downed large trees, removed branches
Thunderstorm/Severe Winds	N/A	6/04/2017	Downed trees throughout area
Flooding –Boise River above flood stage 101 days, local stream flooding	DR-4342	2/2017 to 6/2017	Public Assistance in Unincorporated Ada County: \$312,575; PA Countywide: \$4,493,792
350% of Average Snowfall – County Declaration of Emergency	County Resolution # 2200	Winter 2016-17	Ada County Highway District incurred major expenses during this period
Hailstorm	N/A	3/21/2016	Hail size up to 1"
Thunderstorm/Wind/Power Outages	N/A	8/11/2015	Downed trees, one vehicle damaged by a large branch
Thunderstorm/Wind	N/A	8/10/2015	Gusts at 61 mph
Thunderstorms/Flash Flooding	N/A	7/08/2015	1"+ rainfall in less than one hour
Hailstorm	N/A	5/26/2015	Hail size up to 1.5"
High Winds	N/A	03/17/2014	Estimated gusts 60 mph
Severe Hail, Wind, Thunderstorm	N/A	9/05/2013	Road flooding up to 1' deep
Flood	N/A	5/08/2012	\$540,000.00 - Garden City + ACHD
High Winds/ Micro-burst	N/A	8/21/2010	\$36,100
Highway 16 Wildfire	N/A	7/28/2010	No Data Available
High Winds	N/A	3/29/2009	\$36,700
Oregon Trail Wildfire	N/A	8/25/2008	\$1,700,000.00
Flood	N/A	6/5/2006	No Data Available
Flood	N/A	5/26/2006	No Data Available
Flood	N/A	5/11/2006	No Data Available
Flood	N/A	4/5/2006	No Data Available
Wildfire	N/A	7/26/2005	No Data Available
Wildfire	N/A	7/12/2004	No Data Available
Flood	N/A	7/7/2004	No Data Available
Wildfire	N/A	7/6/2003	No Data Available
Severe Storm/Thunderstorm—Wind	N/A	7/25/2002	Trees, powerlines down. 5,000 without power. Dust storm reduced visibility on I-84 causing 12-car pileup, 4 injured
Wildfire	N/A	7/4/2002	No Data Available
Wildfire	DR-1341	9/1/2000	Hazardous air quality, undisclosed damage.
Wildfire	N/A	7/2/2000	No Data Available
Wildfire	N/A	7/26/1999	No Data Available
Wildfire	N/A	7/19/1999	No Data Available
Flood	N/A	3/7/1999	No Data Available
Severe Storm/Thunderstorm—Wind	N/A	1/16/1999	No Data Available
Severe Storm/Thunderstorm—Wind	N/A	9/6/1998	\$38,000.00
Flood	N/A	5/17/1998	No Data Available

Type of Event	FEMA Disaster #	Date	Damage Assessment
Severe Hail, Wind, Thunderstorm	N/A	4/23/1998	\$20,000.00
High Wind	N/A	9/17/1997	\$62,000.00
Flood	DR-1177	9/11/1997	No Data Available
Flood	DR-1154	7/7/1997	No Data Available
Flood	N/A	1/1/1997	No Data Available
Wildfire	N/A	8/26/1996	No Data Available
Lightning/Wildfire	N/A	7/28/1995	No Data Available
Severe Storm/Thunderstorm—Wind	N/A	4/27/1995	\$50,500.00
Severe Winter Storm/Thunderstorm	N/A	12/1/1994	No Data Available
Flood	N/A	5/7/1993	No Data Available
Winter Weather—Snow	N/A	11/27/1992	No Data Available
Winter Weather –Blizzard	N/A	11/9/1992	No Data Available
Drought	N/A	10/1/1992	\$1,900,000.00 – crop damage
Heat—Wind	N/A	8/20/1992	\$1,900,000 .00– crop damage
Winter Weather—Unusually Cold	N/A	2/4/1989	\$12,800.00
Wildfire	N/A	8/2/1988	No Data Available
Severe Storm/Thunderstorm—Wind	N/A	6/15/1987	\$13,800.00
Flood	N/A	2/1/1986	No Data Available
Wind	N/A	4/15/1985	No Data Available
Flood	N/A	6/1/1983	No Data Available
Hail—Wind	N/A	8/11/1982	\$250,000.00
Flood	N/A	2/1/1982	No Data Available
Wind	N/A	6/30/1981	\$50,000.00
High Winds	N/A	3/29/1981	\$35,700.00
Flood	N/A	1/5/1979	No Data Available
Winter Weather—Extreme Cold	N/A	1/1/1979	\$61,300.00
Wind	N/A	12/15/1977	\$25,000.00
Severe Storm/Thunderstorm—Wind	N/A	6/8/1976	No Data Available
Severe Thunderstorm—Wind, Lightning	N/A	7/29/1975	No Data Available
Wind	N/A	2/26/1974	No Data Available
Flood	N/A	5/26/1973	No Data Available
Winter Weather—Freeze	N/A	12/8/1972	\$125,000.00
Winter Weather—Wind, Snow	N/A	1/9/1972	\$113,600.00
Strong Winds	N/A	3/30/1971	No Data Available
Flood	N/A	1/17/1971	No Data Available
Severe Hail—Wind	N/A	6/26/1970	\$17,200.00

1.6.2 Hazard Risk Ranking

Table 1-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 1-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Wildfire	28	Medium
3	Flood	18	Medium
4	Earthquake	16	Medium
5	Dam/Canal Failure	12	Medium
6	Landslide	12	Medium
7	Drought	9	Low
8	Volcano	6	Low

1.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Critical infrastructure located in or near floodplains require mitigation actions that address a variety of issues to make the facilities more resilient and capable of maintaining continuity of operations.
- Inadequate water supply for fire suppression operations in some areas of the Wildland Urban Interface.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

1.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 1-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 1-12. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action AC-001—Evaluate the cost-effectiveness of raising the walls around the Courthouse basement entries to mitigate the threat of water coming into the basement and flooding the electrical room and generator. Include the Parking structures to the east of the courthouse in the study.</p> <p>Comment: <i>Project is considered no longer feasible, remove from plan.</i></p>		✓		
<p>Action AC-002—Install Bypass switches to 400 Benjamin—east electrical room to allow for tie-in of a back-up Generator. Maintain essential government services during loss of power. This building is also a backup location for other county offices that could lose functionality during a flood.</p> <p>Comment: <i>Bypass and generator have been installed (2019)</i></p>	✓			
<p>Action AC-003—Perform a study to determine the most cost effective method of enhancing the back-up power at the Courthouse so that the facility could maintain full services to the public. Look into the possibility of placing the current Gen-Set on the roof of the facility to remove it from flood issues. A structural study of the building will be required.</p> <p>Comment: <i>It was determined that transferring the transformers to Idaho Power would provide the best alternative for providing redundancies and return to service capabilities. This action was taken in 2019.</i></p>	✓			
<p>Action AC-004—Keep First Responder Facilities out of Flood areas wherever possible. When not possible due to response time issues, design the facilities to keep water from entering, i.e., retaining walls, raise finish floor elevations.</p> <p>Comment: <i>Ongoing effort, must balance location circumstances with response times.</i></p>			✓	AC-6
<p>Action AC-005—Examine and determine the most effective method to harden irrigation canals (i.e., tiling) in areas of high urban interface to prevent the flooding of residences and businesses without losing essential ground water recharge.</p> <p>Comment: <i>Project requires additional coordination with irrigation facility providers.</i></p>			✓	AC-7
<p>Action AC-006—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to; enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p>Comment: <i>Ongoing process to include mailings to floodplain residents, insurance companies and lenders.</i></p>			✓	AC-3
<p>Action AC-007—Assess and prioritize non-structural seismic retrofit needs of County-owned facilities. Once appropriate, cost-effective retrofit measures have been identified, implement the actions based on available funding and resources.</p> <p>Comment: <i>Projects are assessed on an as needed basis as part of budgeted building maintenance and remodeling. No major retrofit has been identified as of yet.</i></p>			✓	AC-8
<p>Action AC-008—Continue outreach to Irrigation Districts in an effort to encourage their participation in the Mitigation Plan as planning partners.</p> <p>Comment: <i>This will be on ongoing action that will include coordination with the US Bureau of Reclamation.</i></p>			✓	AC-9
<p>Action AC-009—Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.</p> <p>Comment: <i>Continuing review of national standards and adoption of relevant codes to reduce risk.</i></p>			✓	AC-10

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action AC-010—Maintain an active Public Outreach strategy using the web, social media, emails and public presentations to inform the public how to personally prepare for and mitigate the hazards of concern.</p> <p><i>Comment: This is a constant process conducted by Ada County Emergency Management and Community Resilience (EMCR). The Community Outreach Specialist conducts in-person presentations, writes a monthly preparedness pointer and informs the public through the agency website and social media platforms: Facebook, Twitter, NextDoor .</i></p>			✓	AC-11
<p>Action AC-011—Maintain emergency alert phone system to notify residents of evacuations orders and procedures during a natural hazard event.</p> <p><i>Comment: Ada County Dispatch maintains CodeRed, an IPAWS enabled platform, to conduct Community Mass Notification as needed.</i></p>			✓	AC-12
<p>Action AC-012— Perform a study to determine the feasibility of creating Open Space and Mitigation District. The district would manage acquired lands using practices that balanced the needs of community open space and recreation with appropriate mitigation activities that reduce or eliminate 3 known hazards of concern. Purposed activities include but are not limited to the maintenance of lands purchased in the floodplain, slope stabilization through low biomass native vegetation projects and the creation and maintenance of fire safe buffers in the WUI.</p> <p><i>Comment: At this time, funding for such a district has not been identified.</i></p>			✓	AC-13
<p>Action AC-013—Participate in Dam Failure and high water release exercises conducted by Army Corps of Engineers</p> <p><i>Comment: The agency participates in annual exercises conducted by either USACE or BOR.</i></p>			✓	AC-14
<p>Action AC-014—Maintain an active dialogue with all the partners involved in the release rates of water from Lucky Peak Dam. Continue to seek a balance in the regulated flows that meets the needs of agricultural water users, flood control for urban areas and river recreationists.</p> <p><i>Comment: EMCR maintains an active dialogue with both USACE and the BOR. One of the primary points of contact is through the Idaho Silver Jackets.</i></p>			✓	AC-15
<p>Action AC-015—Continue to maintain/enhance the County’s classification under the Community Rating System.</p> <p><i>Comment: Ada County actively pursues this goal through emergency, mitigation and community planning.</i></p>			✓	AC-16
<p>Action AC-016—Integrate Multi-Hazard Mitigation Plan into the 2016 update to the Ada County Comprehensive Plan.</p> <p><i>Comment: Key elements of the Mitigation Plan were included in the Ada County 2025 Comprehensive Plan Update.</i></p>	✓			
<p>Action AC-017—Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, prioritizing properties with a history of repetitive loss or very high exposure to risk.</p> <p><i>Comment: No buildings have been identified at this time.</i></p>			✓	AC-1
<p>Action AC-018—Support County-wide initiatives identified in Volume 1.</p> <p><i>Comment: Continue in the plan update</i></p>			✓	AC-17
<p>Action AC-019—Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.</p> <p><i>Comment: BATool purchased and implemented as a means of streamlining this process for all partners.</i></p>			✓	AC-2
<p>Action AC-020—Where appropriate, relocate or harden governmental records and service facilities currently located in hazard-prone areas. If the facilities cannot be relocated, determine and employ the most cost-effective methodologies to protect facilities from future potential damage caused by the known hazards of concern.</p> <p><i>Comment: Records are in process of being digitized and maintained on servers outside of known hazard zones.</i></p>			✓	AC-18

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action AC-021—Evaluate flood, Dam Failure and earthquake risk to all Paramedic Stations and identify cost-effective solutions to mitigate those risks.</p> <p><i>Comment: Tools have been developed to perform initial study.</i></p>			✓	AC-19
<p>Action AC-022—Identify and install appropriate resources to ensure Barber Dam operations are uninterrupted by a loss of power. Solutions include a SCADA (supervisory control and data acquisition) system upgrade and/or backup power (generator, battery etc.).</p> <p><i>Comment: This project has been reviewed and found not to be feasible.</i></p>		✓		
<p>Action AC-023—Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.</p> <p><i>Comment: Ongoing process, work to restore banks after 2017 flooding is being conducted in accordance with this initiative. Most of the repairs have been completed and included green solutions where applicable.</i></p>			✓	AC-20

1.8 HAZARD MITIGATION ACTION PLAN

Table 1-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 1-14 identifies the priority for each action. Table 1-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action AC-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.</p> <p><i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide</p>						
Existing	3, 8, 9	Ada County Planning and Development Services	EMCR	High	HMGP, BRIC, FMA, Increased Cost of Compliance (ICC)	Short-term
<p>Action AC-2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p><i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought, Volcano</p>						
New & Existing	All	EMCR	N/A	Low	Staff Time, General Funds	Short-term
<p>Action AC-3—Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:</p> <ul style="list-style-type: none"> Enforce the flood damage prevention ordinance. Participate in floodplain identification and mapping updates. Provide public assistance/information on floodplain requirements and impacts. <p><i>Hazards Mitigated:</i> Flood</p>						
New & Existing	2, 3, 4, 6, 8, 9	Ada County Planning and Development Services	N/A	Low	Staff Time, General Funds	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action AC-4 — Coordinate with community stakeholders in both the public and private sectors to identify and pursue adaptive capacity strategies that could improve community resilience in relation to future climate conditions.						
<u>Hazards Mitigated:</u> Drought, Flood, Extreme Weather, Wildfire						
New & Existing	2, 3, 4, 6, 9, 10	EMCR	N/A	Low	Staff Time, General Funds	Ongoing
Action AC-5 — Identify and install the most suitable backup power solution for critical facilities and infrastructure that lack adequate backup power. Solutions may vary based on circumstances and could include but are not limited to generators, switches, battery storage, and solar systems.						
<u>Hazards Mitigated:</u> Flood, Extreme Weather, Earthquake						
Existing	1, 3, 10	Ada County Operations Dept.	N/A	Medium	Ada County, BRIC, FMA	Ongoing
Action AC-6 — Keep First Responder Facilities out of flood areas wherever possible. When not possible due to response time issues, design the facilities to keep water from entering, i.e., retaining walls, raise finish floor elevations.						
<u>Hazards Mitigated:</u> Flood, Extreme Weather						
New & Existing	1, 10	Ada County Operations	N/A	Medium	Ada County, BRIC, FMA	Ongoing
Action AC-7 — Examine and determine the most effective method to harden irrigation canals (i.e., tiling) in areas of high urban interface to prevent the flooding of residences and businesses without losing essential ground water recharge.						
<u>Hazards Mitigated:</u> Flood, Extreme Weather, Earthquake, Drought						
Existing	1, 2, 9, 10	Ada County Irrigation Districts	N/A	High	Ada County Irrigation Districts	Long-term
Action AC-8 — Assess and prioritize non-structural seismic retrofit needs of County-owned facilities. Once appropriate, cost-effective retrofit measures have been identified, implement the actions based on available funding and resources.						
<u>Hazards Mitigated:</u> Earthquake						
Existing	1, 2, 3	Ada County Operations Dept.	N/A	Medium	Ada County, BRIC	Long-term
Action AC-9 — Continue outreach to Irrigation Districts in an effort to encourage their participation in the Mitigation Plan as planning partners.						
<u>Hazards Mitigated:</u> Flood, Extreme Weather						
Existing	6, 9, 10	EMCR	N/A	Low	Ada County	Ongoing
Action AC-10 — Determine feasibility of adopting appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.						
<u>Hazards Mitigated:</u> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought						
New and Existing	4, 5, 6	Ada County	N/A	Low	Ada County	Ongoing
Action AC-11 — Maintain an active Public Outreach strategy using the web, social media, emails and public presentations to inform the public how to personally prepare for and mitigate the hazards of concern.						
<u>Hazards Mitigated:</u> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought						
New and Existing	2, 8, 9	EMCR	N/A	Low	EMCR	Ongoing
Action AC-12 — Maintain emergency alert phone system to notify residents of evacuations orders and procedures during a natural hazard event.						
<u>Hazards Mitigated:</u> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought						
Existing	7, 8	Ada County Dispatch	N/A	Low	Ada County Dispatch	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action AC-13— Perform a socioeconomic analysis that examines the creation and maintenance of an Open Space and Mitigation District. The district would manage acquired lands using practices that balanced the needs of community open space and recreation with appropriate mitigation activities that reduce or eliminate 3 known hazards of concern. Purposed activities include but are not limited to the maintenance of lands purchased in the floodplain, slope stabilization through low biomass native vegetation projects and the creation and maintenance of fire safe buffers in the WUI.</p> <p><u>Hazards Mitigated:</u> Flood, Wildfire, Landslide</p>						
New	3, 4, 6, 9	Partnership of jurisdictions and academia	N/A	Medium	Partnership of jurisdictions, BRIC	Long-term
<p>Action AC-14— Participate in Dam Failure and high water release exercises conducted by Army Corps of Engineers</p> <p><u>Hazards Mitigated:</u> Flood, Dam/Canal Failure</p>						
Existing	2, 9	EMCR	N/A	Low	EMCR	Ongoing
<p>Action AC-15— Maintain an active dialogue with all the partners involved in the release rates of water from Lucky Peak Dam. Continue to seek a balance in the regulated flows that meets the needs of agricultural water users, flood control for urban areas and river recreationists.</p> <p><u>Hazards Mitigated:</u> Dam/Canal Failure, Flood, Drought</p>						
New and Existing	2, 9	EMCR	N/A	Low	EMCR	Ongoing
<p>Action AC-16— Continue to maintain/enhance the County’s classification under the Community Rating System.</p> <p><u>Hazards Mitigated:</u> Flood</p>						
New and Existing	3, 4, 5, 6, 8	Ada County Planning and Development Services	N/A	Low	Ada County	Ongoing
<p>Action AC-17— Support County-wide initiatives identified in Volume 1.</p> <p><u>Hazards Mitigated:</u> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought, Volcano</p>						
New and Existing	All	EMCR	N/A	Low	Ada County	Short-term
<p>Action AC-18— Where appropriate, relocate or harden governmental records and service facilities currently located in hazard-prone areas. If the facilities cannot be relocated, determine and employ the most cost-effective methodologies to protect facilities from future potential damage caused by the known hazards of concern.</p> <p><u>Hazards Mitigated:</u> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide</p>						
Existing	1, 3, 10	Ada County Planning and Development Services	EMCR	High	FEMA Hazard Mitigation Grant Programs, ICC	Long-term
<p>Action AC-19— Evaluate flood, dam/canal failure and earthquake risk to all Paramedic Stations and identify cost-effective solutions to mitigate those risks.</p> <p><u>Hazards Mitigated:</u> Flood, Dam/Canal Failure, Earthquake</p>						
Existing	1, 3, 10	Ada County Emergency Medical Services District (ACEMSD)	N/A	Medium	ACEMSD, BRIC, FMA	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action AC-20 — Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure						
New and Existing	2, 5, 9	Ada County	N/A	Medium	Ada County, BRIC, FMA, Idaho Water Resources Board (IWRB)	Ongoing
Action AC-21 — Update the Black's Creek Reservoir breach analysis and the resulting downstream flood inundation map using the most recent, highest resolution GIS data available. The model suggested for use should be HEC-RAS or an equivalent two-dimensional model that can satisfactorily recognize and address the hydrologic interactions with all natural and constructed geographic features that are located downstream of the facility. The breach analysis will model the reservoir at a full pool condition and will include two (2) scenarios consisting of (1) a non-flood failure (aka "sunny day"), and (2) a flood event failure during the 1% inflow design flood (aka 100-year flood).						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure						
New and Existing	2, 6, 7, 8, 9	EMCR	City of Meridian	Medium	BRIC, FMA	Short-term
Action AC-22 — Design and complete a Greenbelt Pathway Riverbank Stabilization project that includes three separate areas adjacent the Boise River, within Unincorporated Ada County, that were damaged during the 2017 flood.						
<i>Hazards Mitigated:</i> Flood, Soil Erosion, Extreme Weather						
Existing	6, 10	Ada County Operations Dept.	N/A	Low	American Rescue Plan Act (ARPA) 2021	Short-term
Action AC-23 — Plan and complete a project to remove the horse barns located within the floodway of the Boise River on Expo Idaho land. The project will safely remove the structures, reduce flood risk, remove potential nonpoint source pollution, and stabilize the bare ground with natural solutions (i.e., native grasses) to prevent erosion.						
<i>Hazards Mitigated:</i> Flood, Soil Erosion, Surface Water Contamination						
Existing	3, 6, 9, 10	Ada County Operations Dept.	N/A	Low	ARPA 2021	Short-term
Action AC-23 — Work with Boise River Flood Control District #10 to develop a channel and gravel management plan, leveraging the Boise River Management Tool (2-D BRMT), including a Digital Elevation Model of difference (DoD) map and biomass model in the river along Unincorporated Ada County. (Coordinates with Flood Control District #10 Action FCD10-15)						
<i>Hazards Mitigated:</i> Flood, Soil Erosion, Surface Water Contamination						
New & Existing	2, 6, 8, 9, 10	Ada County Development Services	Flood Control District #10	Low	FCD#10, Ada County	Short-term
Action AC-24 — Integrate the Multi-Hazard Mitigation Plan into updates of the Ada County Comprehensive Plan.						
<i>Hazards Mitigated:</i> All Hazards						
New and Existing	2, 5, 6	Ada County Planning and Development Services	EMCR	Low	Ada County	Long-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 1-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	10	Medium	Low	Yes	No	Yes	High	Low
3	6	Medium	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	3	Medium	Medium	Yes	Yes	Yes	Medium	Medium
6	3	Medium	Medium	Yes	Yes	No	Low	Low
7	4	High	High	Yes	Yes	No	Low	Low
8	3	Medium	Medium	Yes	Yes	No	Medium	Medium
9	3	Low	Low	Yes	No	Yes	Low	Low
10	3	Medium	Low	Yes	No	Yes	High	Low
11	3	Medium	Low	Yes	No	Yes	High	Low
12	2	Medium	Low	Yes	Yes	Yes	High	Low
13	4	High	High	Yes	Yes	No	Medium	Medium
14	2	Low	Low	Yes	No	Yes	High	Low
15	2	Medium	Low	Yes	No	Yes	High	Low
16	5	Medium	Low	Yes	No	Yes	High	Low
17	10	Medium	Low	Yes	Yes	Yes	High	Low
18	3	High	High	Yes	Yes	No	Medium	Medium
19	3	Medium	Medium	Yes	Yes	No	Medium	Medium
20	3	High	Medium	Yes	Yes	No	Medium	High
21	5	Medium	Medium	Yes	Yes	No	Medium	High
22	2	Medium	Low	Yes	Yes	Yes	High	Low
23	4	Medium	Low	Yes	Yes	Yes	High	Low
24	3	Medium	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 1-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather	AC-10	AC-1, 6, 18	AC-9, 11	AC-7, 23	AC-5, 12	AC-22, 23	AC-4, 7	AC-2, 4, 7, 17, 24
Medium-Risk Hazards								
Wildfire	AC-10	AC-1, 18	AC-11		AC-12		AC-4	AC-2, 4, 13, 17, 24
Flood	AC-3, 10, 16	AC-1, 6, 16, 18, 19	AC-3, 9, 11, 16	AC-7, 15, 20, 23	AC-5, 12	AC-22, 23	AC-4, 7	AC-2, 3, 4, 7, 13, 14, 15, 16, 17, 20, 21, 24

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
Earthquake	AC-10	AC-1, 8, 18, 19	AC-11	AC-7	AC-5, 12		AC-7	AC-2, 7, 8, 17, 24
Dam/Canal Failure	AC-10	AC-1, 18, 19	AC-11	AC-15, 20	AC-12			AC-2, 14, 15, 17, 20, 21, 24
Low-Risk Hazards								
Landslide	AC-10	AC-1, 18	AC-11		AC-12			AC-2, 13, 17, 24
Drought	AC-10		AC-11	AC-7, 15	AC-12		AC-4, 7	AC-2, 4, 7, 15, 17, 24
Volcano								AC-2, 17

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

1.9 PUBLIC OUTREACH

Table 1-16 lists public outreach activities for this jurisdiction.

Table 1-16. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Social Media-Plan Update, Twitter/Facebook/NEXTDOOR	08/16/2021	7,000
Social Media- Mitigation Preparedness Pointer, Twitter/Facebook/NEXTDOOR	02/01/2022	6,200
Emergency Preparedness and Disaster Mitigation Booth at Micron	May 16 & 20, 2022	161

1.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **Ada County Zoning Ordinance (Ordinance Number 389, 6-14-2000 with amended sections)** - The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Ada County Building Code Ordinance (Ordinance Number 396, 10-16-2000 with amended sections)** - The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Flood Hazard Overlay District (Ordinance Number 914, 6-10-2020) Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.

- **Wildland-Urban Fire Interface Overlay District (Ordinance Number 699, 6-18-2008)** - The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Hillside Overlay District (Ordinance Number 766, 12-8-2010)** - The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.
- **FEMA Regional Flood Insurance Liaison** – The liaison was used to obtain the most up to date FEMA Flood Insurance Policy numbers for unincorporated Ada County.

2. CITY OF BOISE

2.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Mallory Wilson, Emergency Preparedness Coordinator
333 N. Mark Stall Place
Boise, ID 83704
Telephone: 208-570-6552
e-mail Address: mgwilson@cityofboise.org

Alternate Point of Contact

Romeo Gervais, Assistant Fire Chief
333 N. Mark Stall Place
Boise, ID 83702
Telephone: 208-570-6567
e-mail Address: rgervais@cityofboise.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 2-1.

Table 2-1. Local Hazard Mitigation Planning Team Members

Name	Title
Mallory Wilson	Emergency Preparedness Coordinator
Rachel Holford	Emergency Preparedness Senior Manager
Jason Blais	Building Official Senior Manager
Jim Pardy	City Engineer
Doug Rhinehart	Public Works Project Coordinator
Sara Arkle	Parks Resources Superintendent
Jerry McAdams	Wildfire Mitigation Specialist
Amy Parrish	Climate/Energy Data Analyst

2.2 JURISDICTION PROFILE

2.2.1 Location and Features

The City of Boise is located in southwestern Idaho and northeastern Ada County in a region coined as the Treasure Valley. It is situated within the Boise River Valley at the base of the foothills of the Salmon River Mountains to the north and east. The Boise River traverses the city and is an aesthetic and recreational focal point of the community. The City is also crossed from east to west by a series of geological benches that step up in elevation from the Boise River, each bench representing a previous location of the Boise River floodplain in historic geologic time. A series of major irrigation canals generally follow the contours of the benches, bringing water from the Boise River to outlying farm fields. The extensive irrigation canal system represents a major physical reminder of Boise's agricultural past and the continuing agricultural economy in the western portion of

the Treasure Valley. The southernmost portions of Boise extend into the high desert of the Snake River Plain and are characterized by basaltic soils and formations.

Boise is approximately 350 miles east of the Pacific Ocean, but local climate is shaped in part by maritime influences. In general, the Boise area has a relative mild climate for its northerly latitude. Summers are hot and winters cold, but below zero weather occurs infrequently. The growing season in Boise is 159 day, which again is substantial in relation to latitude. However, even the growing season can vary locally depending upon location within the valley, bench or foothills areas. On average, Boise receives approximately 13-inches of precipitation annually, mostly in the form of winter snow.

2.2.2 History

When trappers and fur traders first began visiting the Boise area in the early 1800s, Indian villages already existed along the Boise River. Fur trading continued as the prominent activity in the area until about 1835. Fort Boise was constructed by the Hudson Bay Company as a stockade in 1834. The original Fort Boise was abandoned in 1855 due to the decline of fur trading in the area.

The discovery of gold in the Boise Basin in 1862 instigated an immediate influx of prospectors and other settlers into the area. As a result of renewed growth, Fort Boise was reestablished in 1863 as an American Military post to protect the settlers. In 1863, a group of early citizens laid out a town-site that included a main road running north of and parallel to the Boise River with several blocks on each side. At this time, Boise was first suggested as the name of the growing community.

The Idaho territory was created by the federal government in 1863. Though Lewiston was initially designated as the territorial capital; that function was relocated to Boise in 1864. This was also the year Boise incorporated as a City. Idaho became the 43rd state in 1890, which further stimulated settlement in the Boise Valley. By 1900, Boise was a thriving community of 6,000 people. The completion of Arrowrock Dam in 1915 opened the valley irrigated farming and helped build the economic base of the community.

Boise continued to grow as a center for farming and mining activities in the region. In the early days, most employment was in retail trade, wholesaling and supply, services and agriculture. Employment in manufacturing and government increased slowly during the first few decades of the 20th century. The population of Boise grew from 6,000 in 1900 to over 205,000 in 2010, with high rates of growth occurring in the 1960s, 1970s, 1990s and the mid- 2000s. The expansion of manufacturing and government fueled much of the growth in the 1970s through early 1990s with Hewlett Packard Company and Micron constructing major electronics manufacturing facilities. Migration from other states, both for jobs and for lifestyle purposes, was a large part of the growth.

In the mid-1980s, downtown redevelopment projects, construction of the regional mall, and a booming housing industry were signs of strong and sustained growth leading into the 1990s. Boise continued to grow quickly throughout the 1990s with annual growth rates as high as 5%. The city experienced a decline in growth rate in the early 2000s with the technology market crash and 9/11, and then rebounded with extremely rapid growth at mid-decade. Growth within Boise has resumed and grown in the last five years.

2.2.3 Governing Body Format

Boise City has a strong Mayor and City Council form of government. The Mayor presides over City Council meetings, has the power to appoint, and serves as the City Manager. All legislative actions are adopted by the City

Council. Other boards and commissions are appointed to decide non-legislative items and/or make recommendations to the City Council.

The City Council is responsible for the adoption of this plan, City Staff is responsible for its implementation.

2.3 CURRENT TRENDS

2.3.1 Population

According to COMPASS, the population of the City of Boise as of April 2022 was 243,570. Since 2017, the population has grown at an average annual rate of 1.3 percent.

2.3.2 Development

Total building permits have stayed at a high level since 2016, with a temporary slowdown in 2020 as the pandemic set in (a high level of development resumed in the spring of 2021). Construction costs have increased significantly, which is reflected in permit values, and land values are significantly higher as well. Total permit counts since 2016 have increased, mainly due to trade permits (e.g., plumbing or electrical), commercial tenant improvement permits, and more home remodeling projects given rapid home price appreciation. Despite a significant housing shortage, new construction permits for single-family housing have stayed more or less level given limited tracts of undeveloped land within Boise compared to neighboring cities and rural county areas. Much infill development has occurred, which limits how much more can occur in the future. Downtown Boise has seen significant growth with numerous large commercial projects, many of which are large, multi-story multifamily projects. Growth in multifamily development is expected to continue. Commercial development has slowed somewhat with the pandemic and remote work, but given Boise’s recent growth, and continuing in-migration, it is expected to continue at a robust level for the foreseeable future. In sum, development is expected to continue at a high level, but the composition may change as Boise continues to urbanize and build upward, with limited potential to build outward.

Future growth is anticipated south of the city, with development near the airport, in previously undeveloped areas, and potential annexation of new areas for both housing and commercial development. Additional foothills development is expected to be limited. Development east and southeast of the city, into undeveloped areas, is also likely to occur, though for the near term may be limited. Table 2-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan.

Table 2-2. Recent and Expected Future Development Trends

Criterion	Response
<p>Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i></p>	<p>Yes</p> <p>Estimate 500 or fewer acres annexed, and 250 or fewer buildings or structures.</p>
<p>Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i></p>	<p>Yes</p> <p>Mainly housing on the south/southwest side of the city, with some commercial/industrial also being added. Planning & Development Services</p>

Criterion	Response																														
<p>Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i></p>	<p>Yes</p> <p>South and southwest development as noted above. Also, some on the east/southeast end of the city near Micron’s facilities. New housing near Micron is a mostly undeveloped area with sagebrush. Also, while more limited now, some ongoing foothills housing development is in areas with sagebrush/wildland fire potential.</p>																														
<p>How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="background-color: #003366; color: white;">2016</th> <th style="background-color: #003366; color: white;">2017</th> <th style="background-color: #003366; color: white;">2018</th> <th style="background-color: #003366; color: white;">2019</th> <th style="background-color: #003366; color: white;">2020</th> </tr> </thead> <tbody> <tr> <td>Single Family</td> <td>696</td> <td>726</td> <td>711</td> <td>704</td> <td>682</td> </tr> <tr> <td>Multi-Family</td> <td>58</td> <td>50</td> <td>34</td> <td>40</td> <td>41</td> </tr> <tr> <td>Other</td> <td>116</td> <td>137</td> <td>105</td> <td>105</td> <td>76</td> </tr> <tr> <td>Total</td> <td>870</td> <td>913</td> <td>850</td> <td>849</td> <td>799</td> </tr> </tbody> </table>		2016	2017	2018	2019	2020	Single Family	696	726	711	704	682	Multi-Family	58	50	34	40	41	Other	116	137	105	105	76	Total	870	913	850	849	799
	2016	2017	2018	2019	2020																										
Single Family	696	726	711	704	682																										
Multi-Family	58	50	34	40	41																										
Other	116	137	105	105	76																										
Total	870	913	850	849	799																										
<p>Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.</p>	<ul style="list-style-type: none"> • Special Flood Hazard Areas: Limited development in or near the river corridor, both residential and commercial. • Landslide: Housing in one such area of foothills was abandoned – limited housing had been built there. • High Liquefaction Areas: N/A • Wildfire Risk Areas: Some in the foothills on the north and east/southeast sides of the city, and in undeveloped land to the southeast. 																														
<p>Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.</p>	<p>Significant infill has occurred and limited areas to build upon remain. Without significant annexation, remaining infill and redevelopment areas will be built out and additional infill development will become increasingly limited. The city is bounded on the north by foothills and on the west and southwest by Eagle, Meridian, and a developed area of Ada County.</p>																														

2.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 2-3.
- Development and permitting capabilities are presented in Table 2-4.
- An assessment of fiscal capabilities is presented in Table 2-5.
- An assessment of administrative and technical capabilities is presented in Table 2-6.
- An assessment of education and outreach capabilities is presented in Table 2-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 2-8.
- Classifications under various community mitigation programs are presented in Table 2-9.

Table 2-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	No	Yes	No
<i>Comment: 2018 International Building Code (IBC)/Title 9, Building Codes and Regulations, Chapter 1A Building Code: adopted 1/1/2021 2018 International Existing Building Code (IEBC)/Title 9, Building Codes and Regulations, Chapter 10 Existing Building Code: adopted 1/1/2021 2018 International Residential Code (IRC)/Title 9, Building Codes and Regulations, Chapter 1B One-And-Two-Family Dwelling Building Code: adopted 1/1/2021</i>				
Zoning Code	Yes	No	No	Yes
<i>Comment: Title 11, Development Code</i>				
Subdivisions	Yes	No	No	No
<i>Comment: Title 11, Development Code</i>				
Stormwater Management	Yes	Yes	Yes	Yes
<i>Comment: Title 10, Public Utilities, Chapter 6, Stormwater Management and Discharge Control and Title 9, Building Codes and Regulations, Chapter 14, Construction Site Erosion Control, Boise shares responsibility with ACHD and others for the National Pollutant Discharge Elimination System (NPDES) program</i>				
Post-Disaster Recovery	No	No	No	No
<i>Comment: N/A</i>				
Real Estate Disclosure	No	No	No	No
<i>Comment: Idaho Statute 55-2508</i>				
Growth Management	Yes	No	No	No
<i>Comment: Blueprint Boise, Adopted 11/2011</i>				
Site Plan Review	Yes	No	No	No
<i>Comment: Requirement of Title 11, Development Code</i>				
Environmental Protection	Yes	Yes	No	Yes
<i>Comment: Blueprint Boise, Adopted 11/2011, Boise River Resource Management and Master Plan, Adopted 8/21/2014, Waterways Overlay Districts, Boise River System Overlay Districts, Title 11, Development Code</i>				
Flood Damage Prevention	Yes	No	No	Yes
<i>Comment: 2018 International Building Code (IBC)/Title 9, Building Codes and Regulations, Chapter 1A Building Code: adopted 1/1/2021 2018 International Residential Code (IRC)/Title 9, Building Codes and Regulations, Chapter 1B One-And-Two-Family Dwelling Building Code: adopted 1/1/2021 Title 11, Development Code</i>				
Emergency Management	Yes	Yes	No	Yes
<i>Comment: Boise City Office of Emergency Preparedness now in place; Ada County Emergency Management</i>				
Climate Change	Yes	No	No	Yes
<i>Comment: Boise's Climate Action Roadmap 2021</i>				
Other	No	No	No	No
<i>Comment: N/A</i>				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Planning Documents				
General Plan	Yes	No	No	Yes
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>	Yes			
<i>Comment: Blueprint Boise, Adopted 11/2011</i>				
Capital Improvement Plan	Yes	No	No	No
<i>What types of capital facilities does the plan address? All city facilities</i>				
<i>How often is the plan updated? Annual budget, with 5-year capital improvement plan</i>				
Disaster Debris Management Plan	Yes	No	No	No
<i>Comment: Public Works Disaster Debris Operational Guidance document; Planning coordination with Ada County Debris Management Plan</i>				
Floodplain or Watershed Plan	Yes	Yes	No	Yes
<i>Comment: Ada County Multi-Hazard Mitigation Plan serves as the Flood Management Plan of record for all communities within the planning area that participate in CRS.</i>				
Stormwater Plan	Yes	Yes	Yes	Yes
<i>Comment: Stormwater Management Program</i>				
Urban Water Management Plan	No	No	No	No
<i>Comment: N/A</i>				
Habitat Conservation Plan	Yes	No	No	No
<i>Comment: Foothills and Open Space Management Plan, Boise River Resource Management and Master Plan, Adopted 8/21/2014</i>				
Economic Development Plan	Yes	No	No	No
<i>Comment: City of Boise Economic Development Strategic Plan, November 2021</i>				
Shoreline Management Plan	No	No	No	No
<i>Comment: Enter Comment</i>				
Community Wildfire Protection Plan	No	Yes	No	Yes
<i>Comment: The 2017 version of this plan serves as the CWPP. In addition, the 2021 update to the Ada County Multi-Hazard mitigation plan is being prepared to qualify as a CWPP for the Ada County Planning area.</i>				
Forest Management Plan	Yes	No	No	No
<i>Comment: 2015 Community Forestry Strategic Management Plan</i>				
Climate Action Plan	Yes	No	No	Yes
<i>Comment: Boise's Climate Action Roadmap, 2021</i>				
Comprehensive Emergency Management Plan	Yes	Yes	No	Yes
<i>Comment: 2020 City of Boise, Emergency Operations Plan</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	Yes	No	No
<i>Comment: Ada County THIRA, May 2015</i>				
Post-Disaster Recovery Plan	No	No	No	Yes
<i>Comment: Coordination with Ada County on future development of Recovery Plan</i>				
Continuity of Operations Plan	Yes	No	No	No
<i>Comment: City of Boise Continuity of Operations Plan in development</i>				
Public Health Plan	No	Yes	No	No
<i>Comment: Central District Health Department Emergency Operations Plan, 2019</i>				
Other	No	No	No	No
<i>Comment: N/A</i>				

Table 2-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i>	Yes Planning and Development Services
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	Yes

Table 2-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify:</i> Geothermal, Solid Waste, Water Renewal (enterprise funds)	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 2-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> City Planning and Development Staff and Public Works Engineers	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> City Planning Staff and Public Works Engineers	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> City Planning and Development Staff and Public Works Engineers	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> City Budget Staff	Yes
Surveyors <i>If Yes, Department /Position:</i> City Public Works Staff- City Surveyor	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> City Planning and Development Staff, Public Works Staff, IT Staff, Fire Data Analyst	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Parks and Recreation – Foothills Restoration Specialist; Close coordination with Boise State University Hazard and Climate Resiliency Institute	Yes
Emergency manager <i>If Yes, Department /Position:</i> City Office of Emergency Management (2 Staff) Ada County Emergency Management (EMCR)	Yes
Grant writers <i>If Yes, Department /Position:</i> City Police and Fire Staff, Department of Finance and Administration Budget Staff and Grants Manager	Yes

Table 2-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes – City Community Engagement Department and some departments have designated public information officers
Do you have personnel skilled or trained in website development?	Yes – IT Staff, Community Engagement Department
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Wildfire and flood information on city website. Links to EMCR site.	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> City has Facebook, Twitter, and other accounts. Accounts are used to provide information during times throughout the year.	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Planning and Zoning Commission, Parks and Recreation Commission, Public Works Commission, Building Code Committee	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Various city public education events throughout the year.	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red– residents may sign up to receive emergency notifications and critical community alerts. Access to IPAWS infrastructure through State system.	Yes

Table 2-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Planning and Development Services
Who is your floodplain administrator? (department/position)	Planning Director
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	2020
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> Increased freeboard requirements in all SFHAs.	Exceeds
When was the most recent Community Assistance Visit or Community Assistance Contact?	Summer 2019
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i> Boise City annexed property that had existing violations (undersize culverts) that preexisted Boise City jurisdiction.	Yes
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i>	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i> Updated mapping in progress	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> Training for new floodplain administrator	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> No <i>If no, is your jurisdiction interested in joining the CRS program?</i> N/A	Yes

Criterion	Response
How many flood insurance policies are in force in your jurisdiction? ^a	950
What is the insurance in force? \$276,428,300	
What is the premium in force? \$624,142	
How many total loss claims have been filed in your jurisdiction? ^a	55
What were the total payments for losses? \$102,909	

a. According to FEMA statistics as of March 31, 2022

Table 2-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	1600108830	N/A
DUNS #	Yes	070017017	N/A
Community Rating System	Yes	6	2015
Building Code Effectiveness Grading Schedule	Yes	3	2021
Public Protection	Yes	3	2013
Storm Ready	Yes	N/A	N/A
Firewise	Yes	N/A	N/A

2.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

2.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Blueprint Boise**—Provides guidance for development of areas impacted by hazards with similar but aligned goals.
- **Foothills and Open Space Management Plan**—Provides guidance for development of areas impacted by hazards with similar but aligned goals.
- **Boise River System Ordinance**—Provides guidance for development of areas impacted by hazards with similar but aligned goals.
- **Stormwater Management Plan**—Provides guidance and requirements for construction, industrial and municipal activities to meet NPDES requirements

2.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- As additional plans are created or updated we will consider inclusion of principals and goals of the Multi-Hazard Mitigation Plan.
- Future updates to the City of Boise Comprehensive Plan will reference this HMP in land use sections.
- **Boise’s Climate Action Roadmap**—Provides guidance for addressing current and future hazards related to the changing climate
- **City of Boise Emergency Operations Plan**—ensure next plan update aligns with hazard mitigation plan updates.
- **Disaster Recovery Plan**—Engage with County on recovery planning initiatives.
- **Community Wildfire Protection Plan**—will reference wildfire hazard maps and data in this HMP.
- **Stormwater Management Program**—flood and extreme weather data may be used in the program.
- **City of Boise Water Renewal Utility Plan**—will consider drought hazard data from the Hazard Mitigation Plan.
- **Emergency Preparedness**—further promote mitigation planning and grant opportunities within the city

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

2.6 RISK ASSESSMENT

2.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 2-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 2-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Excessive Heat	N/A	6/28/2021	Cooling shelters; minimal local costs
Earthquake	N/A	3/31/2020	No local damage; evaluated infrastructure
COVID-19 Pandemic	DR-4534	1/20/2020 - ongoing	N/A
Winter Storms	N/A	December 2016	N/A
Flooding	DR-4342	3/29/2017	\$3,341,756.00
Severe Wind	N/A	3/29/2009	\$33,000 (countywide)
Wildfire	N/A	1/28/2009	\$1.66 Million
Flooding	N/A	9/11/1997	\$57,000
Wildfire	N/A	8/26/1996	\$3.3 million

Type of Event	FEMA Disaster #	Date	Damage Assessment
Severe Wind	N/A	4/27/1995	\$50,000 (countywide)
Flooding	N/A	02/1986	\$20,000
Flooding	N/A	06/1983	\$147,000 (countywide)
Earthquake	N/A	10/28/1983	Minimal local damage
Landslide	N/A	11/1980	Unknown
Flooding	N/A	1/12/1979	Unknown

2.6.2 Hazard Risk Ranking

Table 2-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 2-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Wildfire	22	Medium
3	Dam/Canal Failure	18	Medium
4	Flood	18	Medium
5	Earthquake	16	Medium
6	Landslide	12	Low
7	Drought	9	Low
8	Volcano	6	Low

2.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Canal failure: Boise has numerous canals, many of which are situated above homes and businesses. Canal failure would result in flooding of those properties.
- Mass Gatherings: Increase in number and size of large special events taking place within the City.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

2.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 2-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action B-1—Esther Simplot Flood Channel (joint project with Boise City and Garden City); a flood study of the Boise River between Main St. and Veteran’s Memorial Park bridges is underway and expected to result in a project to construct side channels / channel modifications to greatly reduce flood potential in both Garden City and in Boise City</p> <p>Comment: Additional modifications planned to the river channel at Esther Simplot Whitewater Park. The final Letter of Map Revision (LOMR) is now anticipated to be submitted to FEMA for approval in 2023.. With the LOMR approval the Flood Insurance Rate Maps (FIRM) will be modified in this area to include all improvements and increased conveyance channels.</p>			✓	B-6
<p>Action B-2—Complete a Wildland-Urban Interface (WUI) risk assessment (a GIS exercise looking at vegetation in the undeveloped area, age of homes and other relevant factors). Improve individual parcel data with wildfire assessments. Provide a public portal to share data and educate on risk and community wildfire adaptation. Also see North Ada County Fire & Rescue (NACFR) and Whitney Fire District Initiatives.</p> <p>Comment: This is an ongoing program, which will likely need additional future funding to conduct updates to the Riskmap (e.g., LiDAR, Rapid Eye imagery and data translation).</p>			✓	B-7
<p>Action B-3—Conduct wildland fire prevention education and outreach to support and promote fire adapted communities. Focus on fuel reduction on private property around new and existing homes via incentivizing homeowners, providing free debris pick-up and replacement Firewise vegetation at a discount.</p> <p>Comment: Consistent funding mechanisms will need to be found to create an annual woody debris pickup program.</p>			✓	B-8
<p>Action B-4—Fire Station Seismic Upgrades: Boise Fire has already identified two buildings with major seismic problems (including the Logistics/Maintenance building) at a cost of two million dollars. This project will perform a vulnerability assessment on 16 other Fire facilities and initiate upgrades. Also see N. Ada County Fire & Rescue Initiative #2.</p> <p>Comment: Initial condition assessment of fire stations was completed with four slated for remodeling priority.</p>	✓			
<p>Action B-5—Flood Containment Facility Maintenance: Continue to maintain foothills flood containment facilities such as the Cottonwood flood ponds and flume, etc.</p> <p>Comment: Ongoing indefinitely. Facilities are inspected, monitored and maintained on reoccurring basis.</p>			✓	B-9

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action B-6—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to; enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p>Comment: <i>The City continues to maintain good standing under the program.</i></p>			✓	B-4
<p>Action B-7—Continue to maintain/enhance the City's classification under the Community Rating System</p> <p>Comment: <i>The City continues to participate in the Community Rating System.</i></p>			✓	B-10
<p>Action B-8—Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.</p> <p>Comment: <i>Current discussions and analysis of potential plans are ongoing.</i></p>			✓	B-1
<p>Action B-9—Update and adopt a new Wildland Urban Interface (WUI) Code to replace the existing code. Improve and update existing WUI hazard zones.</p> <p>Comment: <i>The City of Boise is currently leading a working group on adopting a consistent area-wide WUI code, and will be updating the Boise City Code as part of this process.</i></p>			✓	B-11
<p>Action B-10—Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern</p> <p>Comment: <i>Ongoing discussions and considerations during all project planning, analysis, and educations programs.</i></p>			✓	B-12
<p>Action B-11— Support County-wide initiatives identified in Volume 1.</p> <p>Comment: <i>Continued efforts to coordinate with identified stakeholders.</i></p>			✓	B-13
<p>Action B-12—Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.</p> <p>Comment: <i>Key representatives from each identified area continue to coordinate and provide information to and from their respective areas.</i></p>			✓	B-3
<p>Action B-13—Offer NOAA SKYWARN Spotter Training for community members to encourage awareness and better ability to provide local information for weather predictions.</p> <p>Comment: <i>Have not seen any recent information from NWS on SKYWARN training opportunities. Will revisit if opportunities are made available again in the future.</i></p>		✓		
<p>Action B-14—For the Alto Via landslide, support evaluation of remediation, purchase or relocation of structures to prevent future damage and repetitive losses with the goal of pursuing mitigation.</p> <p>Comment: <i>The City has no additional action planned in regards to the landslide, but will continue to monitor for any changes.</i></p>		✓		
<p>Action B-15—Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.</p> <p>Comment: <i>The City of Boise continues to work with local experts in combination with best practices on all projects. Public Works Engineering staff is resolved in ensuring our riverbanks are not completely rocked and is using techniques to soften the bank repairs, when applicable, with vegetation and natural techniques.</i></p>			✓	B-14
<p>Action B-16—Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation projects.</p> <p>Comment: <i>Ongoing with distinct need to build capacity. Stack Rock fuels mitigation will be a large, landscape-scale project.</i></p>			✓	B-15

2.8 HAZARD MITIGATION ACTION PLAN

Table 2-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 2-14 identifies the priority for each action. Table 2-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 2-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action B-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.</p> <p><u>Hazards Mitigated:</u> All Hazards</p>						
Existing	1, 2, 3, 4, 9	Planning and Development	Public Works, EMCR	High	HMGP, BRIC, FMA	Short-term
<p>Action B-2— Evaluate and integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community.</p> <p><u>Hazards Mitigated:</u> Flood, Drought, Extreme Weather, Wildfire, Landslide, Dam/Canal Failure, Earthquake</p>						
New & Existing	2, 5, 6	Boise Fire, Planning and Development, Public Works	Other City Departments as appropriate	Low	Staff Time, General Funds	Ongoing
<p>Action B-3—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p><u>Hazards Mitigated:</u> All Hazards</p>						
New & Existing	1, 2, 6, 7, 8, 9, 10	Boise Fire, Planning and Development, Public Works	Parks and Recreation	Low	Staff Time, General Funds	Short-term
<p>Action B-4—Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:</p> <ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. <p><u>Hazards Mitigated:</u> Flood</p>						
New & Existing	1, 2, 9, 10	Planning and Development	N/A	Low	Staff Time, General Funds	Ongoing
<ul style="list-style-type: none"> • Action B-5—Coordinate with community stakeholders in both the public and private sectors to identify and pursue adaptive capacity strategies that could improve community resilience in relation to future climate conditions. • <p><u>Hazards Mitigated:</u> Drought, Flood, Extreme Weather, Wildfire</p>						
New & Existing	2, 3, 4, 6, 9, 10	Public Works	N/A	Low	Staff Time, General Funds	Short-term
<p>Action B-6— Esther Simplot Flood Channel (joint project with Boise City and Garden City); a flood study of the Boise River between Main St. and Veteran’s Memorial Park bridges is underway and expected to result in a project to construct side channels / channel modifications to greatly reduce flood potential in both Garden City and in Boise City</p> <p><u>Hazards Mitigated:</u> Flood</p>						
Existing	1, 2, 3, 9, 10	Public Works	N/A	Medium	Local Funds	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action B-7 — Complete a Wildland-Urban Interface (WUI) risk assessment (a GIS exercise looking at vegetation in the undeveloped area, age of homes and other relevant factors). Improve individual parcel data with wildfire assessments. Provide a public portal to share data and educate on risk and community wildfire adaptation. (Coordinates with North Ada County Fire & Rescue Action NACFR-5 and Whitney Fire Protection District Action WFD-9)						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	2, 4, 6, 8, 9, 10	Boise Fire	N/A	Medium	Western States Grant, HMGP Grant, Local Funds	Short-term and ongoing
Action B-8 — Conduct wildland fire prevention education and outreach via the internet, social media and direct public outreach to support and promote fire adapted communities. Focus on fuel reduction on private property around new and existing homes via incentivizing homeowners, providing free debris pick-up and replacement Firewise vegetation at a discount. (Coordinates with North Ada County Fire & Rescue Action NACFR-14, Whitney Fire Protection District Action WFD-7)						
<i>Hazards Mitigated:</i> Wildfire						
New and Existing	1, 8, 9, 10	Boise Fire	NACFR, Whitney Fire	Low	Western State Grant, Local Funds	Short-term and Ongoing
Action B-9 — Flood Containment Facility Maintenance: Continue to maintain foothills flood containment facilities such as the Cottonwood flood ponds and flume, etc.						
<i>Hazards Mitigated:</i> Flood						
Existing	1, 2, 9, 10	Public Works	N/A	Low	Local Funds	Short-term and Ongoing
Action B-10 — Continue to maintain/enhance the City's classification under the Community Rating System						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 2, 9, 10	Public Works	Planning and Development Services	Low	Local Funds	Ongoing
Action B-11 — Update, adopt, and enforce a new Wildland Urban Interface (WUI) Code to replace the existing code. Improve and update existing WUI hazard zones. (Coordinates with North Ada County Fire & Rescue Action NACFR-3, Whitney Fire Protection District Action WFD-3)						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	1, 2, 4, 5, 6, 9, 10	Boise Fire	Planning and Development Services, NACFR, Whitney Fire	Low	Local Funds	Short-Term
Action B-12 — Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	1, 2, 4, 5, 6, 9, 10	Planning and Development Services	N/A	Low	Local Funds	Ongoing
Action B-13 — Support County-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	1, 2, 6, 7, 8, 9, 10	EMCR	Boise Fire, Planning and Development, Public Works	Low	Local Funds	Short-Term and Ongoing
Action B-14 — Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.						
<i>Hazards Mitigated:</i> Flooding, Dam Failure						
New and Existing	2, 5, 9	Public Works	Parks and Recreation	Medium	Local Funds	Long-Term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action B-15— Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation and fuel-reduction projects, including prescribed fire (Rx fire), pile-burning and managed fire. Increase capacity to conduct these projects through hiring personnel and expenditures for equipment and biological control methods. (Coordinates with Flood Control District #10 Action FCD10-12, North Ada County Fire & Rescue District Action NACFR-15, Whitney Fire Protection District WFD-8)</p> <p><u>Hazards Mitigated:</u> Wildfire</p>						
New & Existing	1, 6, 9, 10	Boise Fire	FCD #10, NACFR, Whitney Fire	Low	Local Funds	Short-Term and Ongoing
<p>Action B-16— Identify and construct Boise River enhancements to decrease river temperature in order to favor aquatic species by restoring native riparian vegetation, side channels, and wetlands. The side channel projects may also provide an opportunity to lower flood risks to certain areas along the river.</p> <p><u>Hazards Mitigated:</u> Flood</p>						
New and Existing	2, 10	Public Works	N/A	Medium	Local Funds, BRIC, HMGP	Short and Long Term
<p>Action B-17—Construction of new facility to serve as Fire Station 5. New building will be brought up to current seismic code.</p> <p><u>Hazards Mitigated:</u> Earthquake</p>						
New	1, 3, 10	Public Works	Boise Fire	Low	Local Funds	Short-Term
<p>Action B-18—Relocate Fire Logistics facility as part of broader support facilities campus relocation project. Current facility</p> <p><u>Hazards Mitigated:</u> Flood, Earthquake</p>						
New	1, 3, 10	Public Works	Boise Fire	Low	Local Funds	Short-Term
<p>Action B-19—Conduct a feasibility study for improvements in the South Channel Boise River near Eagle Island State Park. The City has been engaged with multiple stakeholders discussing potential improvements in the S Channel Boise River and on adjacent lands. Improvements include the creation of a side channel, bank stabilization, improved flood flow control including increased protection of the Idaho Fish and Game Fish Hatchery.</p> <p><u>Hazards Mitigated:</u> Flood</p>						
Existing	1, 2, 3, 10	Public Works	N/A	Medium	BRIC, HMGP, Local Funds	Short-Term
<p>Action B-20 – Reconnect Alta Harris Creek to the Boise River at Barber Pool. Trout Unlimited has worked for nearly ten years to reconnect Alta Harris Creek with the Boise River. A channel has been constructed and vegetation established. The final phase of this project is to connect the creek to an area above Barber Pool to provide continuous flow and to provide fish passage. This project will also provide flood risk reduction.</p> <p><u>Hazards Mitigated:</u> Flood</p>						
New and Existing	2, 10	Public Works	N/A	Medium	Local funds, BRIC, HMGP	Short and Long Term
<p>Action B-21 – Continue Firewise Community program for residents in the foothills and promote adoption of Firewise for development within the wildland urban interface overlay. (Coordinates with North Ada County Fire & Rescue Action NACFR-4, Whitney Fire Protection District WFD-5)</p> <p><u>Hazards Mitigated:</u> Wildfire</p>						
New and Existing	1, 2, 5, 6, 8, 9	Boise Fire Department	NACFR, Whitney Fire	Low	Local funds	Short-term and ongoing
<p>Action B-22 – Campaign to get neighborhoods to revise covenants and homeowners’ association (HOA) rules to mitigate natural hazards. (Coordinates with North Ada County Fire & Rescue Action NACFR-9)</p> <p><u>Hazards Mitigated:</u> Flood, Earthquake, Wildfire</p>						
New and Existing	2, 5, 6, 8, 9	Boise Fire Department	NACFR	Low	Staff Time, General Fund	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action B-23 – Establish Strategic Planning process for foothills. (Coordinates with North Ada County Fire & Rescue Action NACFR-11, Eagle Fire Protection District EFD-12)						
<i>Hazards Mitigated:</i> Wildfire						
Existing	2, 3, 4, 5, 6, 9	Boise Fire Department	NACFR	Medium	Rural Fire Assistance Grant, National Fire Plan	Long-term/Ongoing
Action B-24 – Develop/enhance ability to capture perishable data, including dollar values, after significant events. (Coordinates with North Ada County Fire & Rescue Action NACFR-12)						
<i>Hazards Mitigated:</i> All Hazards						
Existing	2	Boise Fire Department	NACFR	Low	Local Funds	Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 2-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	5	High	High	Yes	Yes	No	Medium	High
2	3	Medium	Low	Yes	No	Yes	High	Low
3	7	Low	Low	Yes	No	Yes	High	Low
4	4	Medium	Low	Yes	No	Yes	High	Low
5	6	Medium	Low	Yes	No	Yes	High	Medium
6	5	High	Medium	Yes	Yes	No	Medium	Low
7	6	High	Medium	Yes	Yes	Yes	Medium	Medium
8	4	Medium	Low	Yes	Yes	Yes	Low	Low
9	4	Medium	Low	Yes	No	Yes	High	Low
10	4	Medium	Low	Yes	No	Yes	High	Low
11	7	High	Low	Yes	No	Yes	High	Low
12	7	Medium	Low	Yes	No	Yes	Medium	Low
13	7	Medium	Low	Yes	Yes	No	Medium	Medium
14	3	High	Medium	Yes	Yes	No	Medium	High
15	4	High	Low	Yes	No	Yes	High	Low
16	2	Medium	Medium	Yes	Yes	Yes	Medium	High
17	3	High	Low	Yes	No	Yes	High	Low
18	3	High	Low	Yes	No	Yes	High	Low
19	4	Medium	Medium	Yes	Yes	Yes	Medium	High
20	2	High	Medium	Yes	Yes	No	High	High
21	6	High	Low	Yes	Yes	Yes	High	High
22	5	High	Low	Yes	Yes	Yes	Medium	Medium
23	6	Medium	Medium	Yes	Yes	Yes	High	High
24	1	Low	Low	Yes	Yes	Yes	Medium	Medium

a. See the introduction to this volume for explanation of priorities.

Table 2-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather	B-2, 12, 3	B-1	B-13, 3		B-13		B-1, 2, 5, 6	B-2, 5, 24
Medium-Risk Hazards								
Dam Failure	B-2, 12, 3	B-1	B-13, 3		B-13			B-2, 24
Earthquake	B-2, 12, 3, 22	B-1, 17, 18	B-13, 3		B-13, 17, 18			B-2, 22, 24
Flood	B-2, 9, 4, 10, 12, 3, 14, 22	B-6, 9, 4, 10, 1, 14, 19	B-13, 3	B-6, 4, 10, 14, 16, 19, 20	B-9, 13	B-6, 16, 19, 20	B-1, 2, 4, 5, 6, 9, 14, 16, 19, 20	B-2, 5, 14, 19, 22, 24
Wildfire	B-2, 7, 8, 11, 12, 3, 15, 21, 22, 23	B-7, 8, 1, 11, 15	B-13, 3	B-6, 4, 10, 14	B-7, 8, 11, 13, 15		B-1, 2, 5, 7, 8, 11, 15	B-2, 5, 15, 21, 22, 23, 24
Low-Risk Hazards								
Drought	B-2, 12, 3	B-1	B-13, 3		B-13		B-2, 5	B-2, 5, 24
Landslide	B-2, 12	B-1						B-2, 24
Volcano		B-1						B-24

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

2.9 PUBLIC OUTREACH

Table 2-16 lists public outreach activities for this jurisdiction.

Table 2-16. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Wildfire mitigation/Firewise outreach activities	Various	Unknown

2.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **City of Boise Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of Boise Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- **Boise Water Renewal Utility Plan** – The plan was reviewed for potential projects that would lead to reduction of flood risk.

- **Boise’s Climate Action Roadmap** – Reviewed for integration opportunities and analysis of mitigation actions for climate resilience.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

CITY OF BOISE












EAGLE

GARDEN CITY

MERIDIAN

Lucky Peak Dam Failure Inundation Area

Legend

-  Maximum Pool Inundation Area
-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, IDWR



CITY OF BOISE



0 1.5 3 Miles



Boise County



NEHRP Soil Classes

- Legend**
- C (Dense soil/soft rock)
 - D (Stiff soil)
 - E (Soft clay)
 - Study Area
 - Ada County Boundary
 - City Boundary
 - County Boundary
 - Interstate
 - Major Roads
 - Rail
 - Waterbody

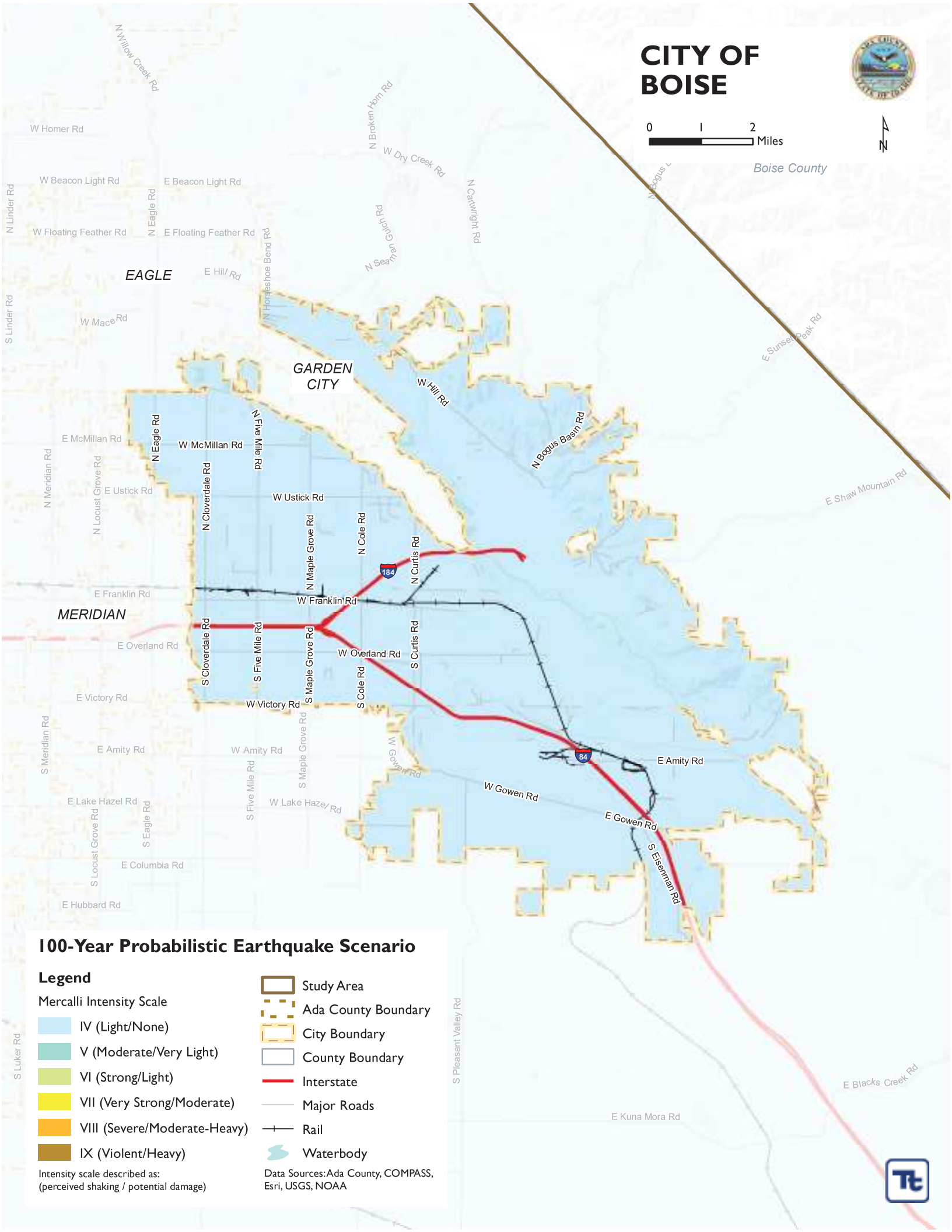
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF BOISE



Boise County



100-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

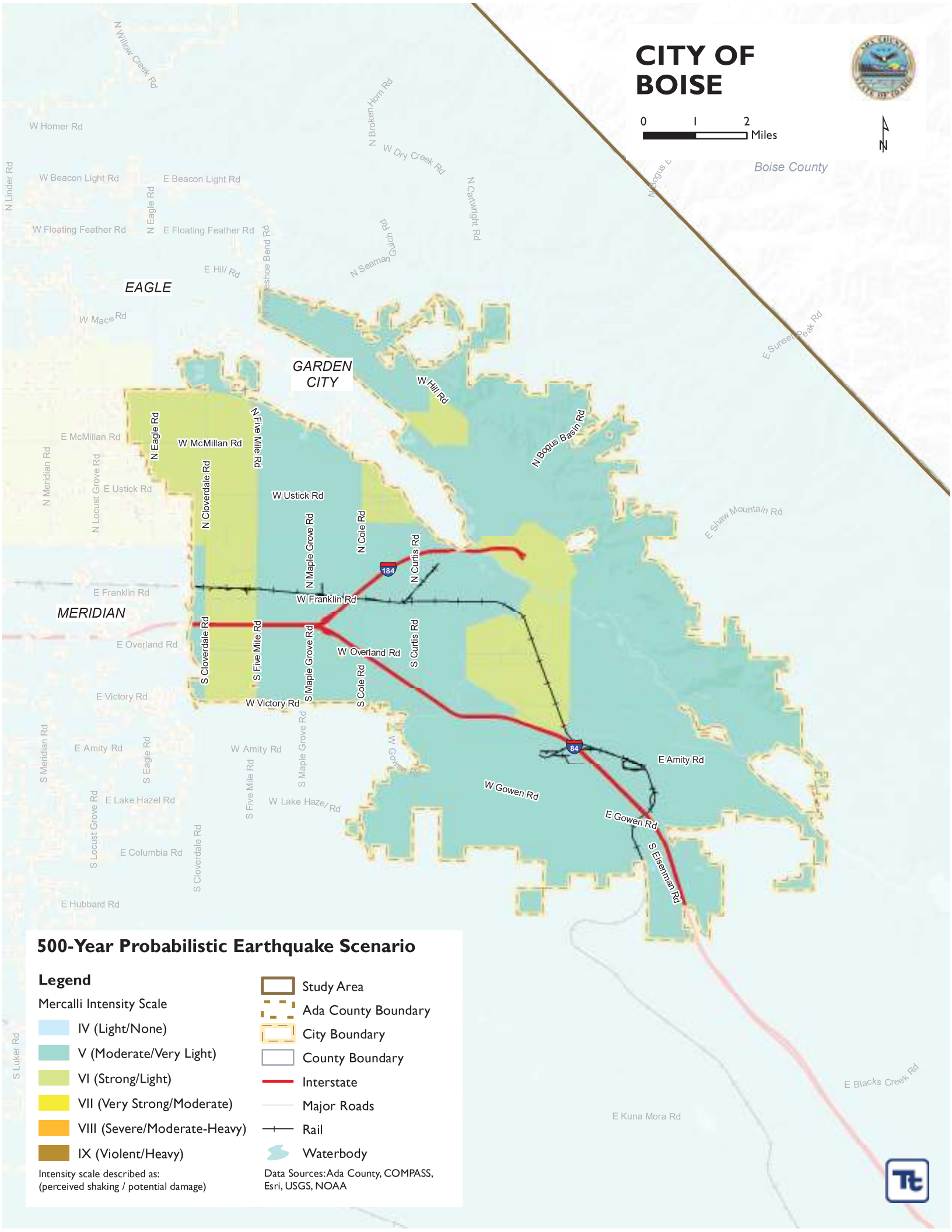
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF BOISE



500-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

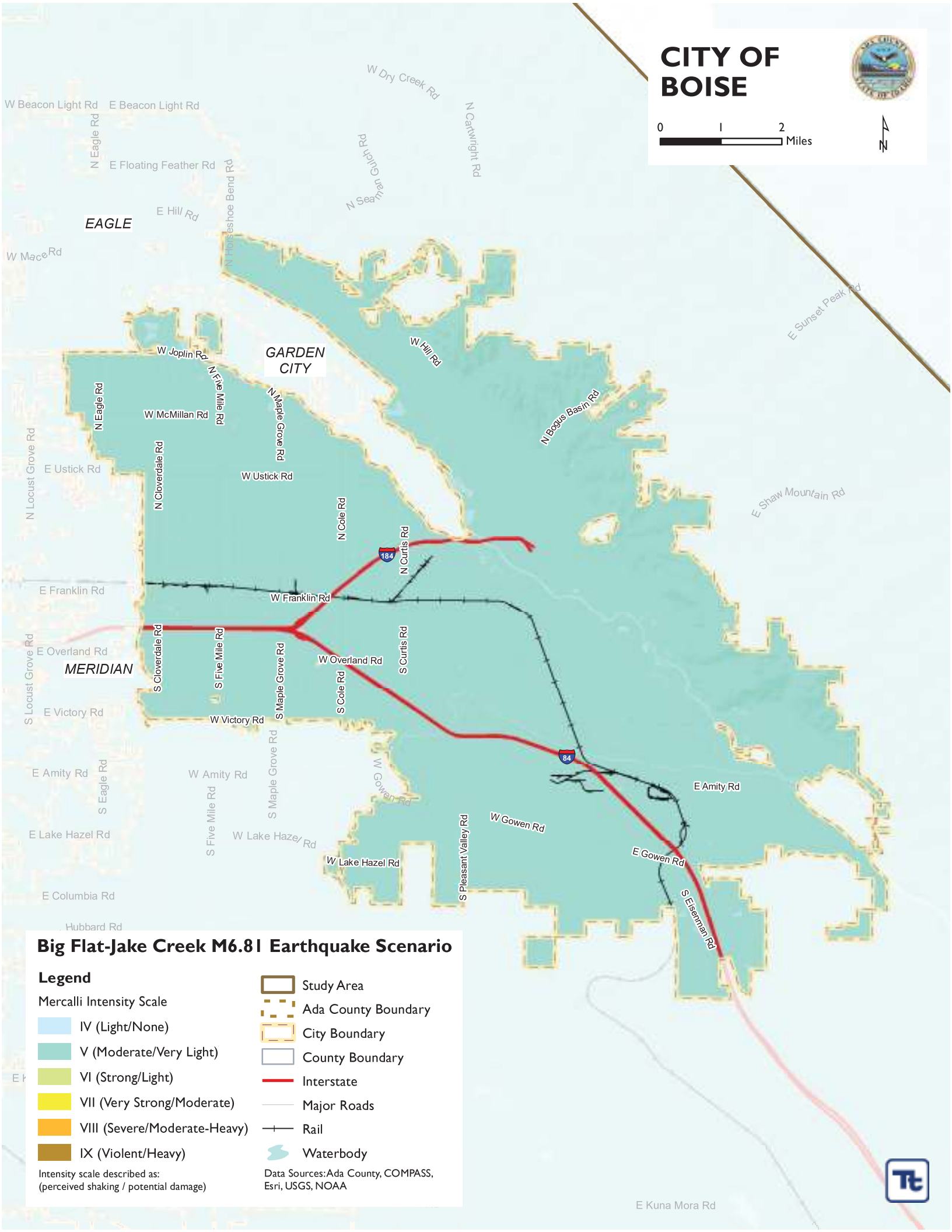
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF BOISE



Big Flat-Jake Creek M6.8I Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

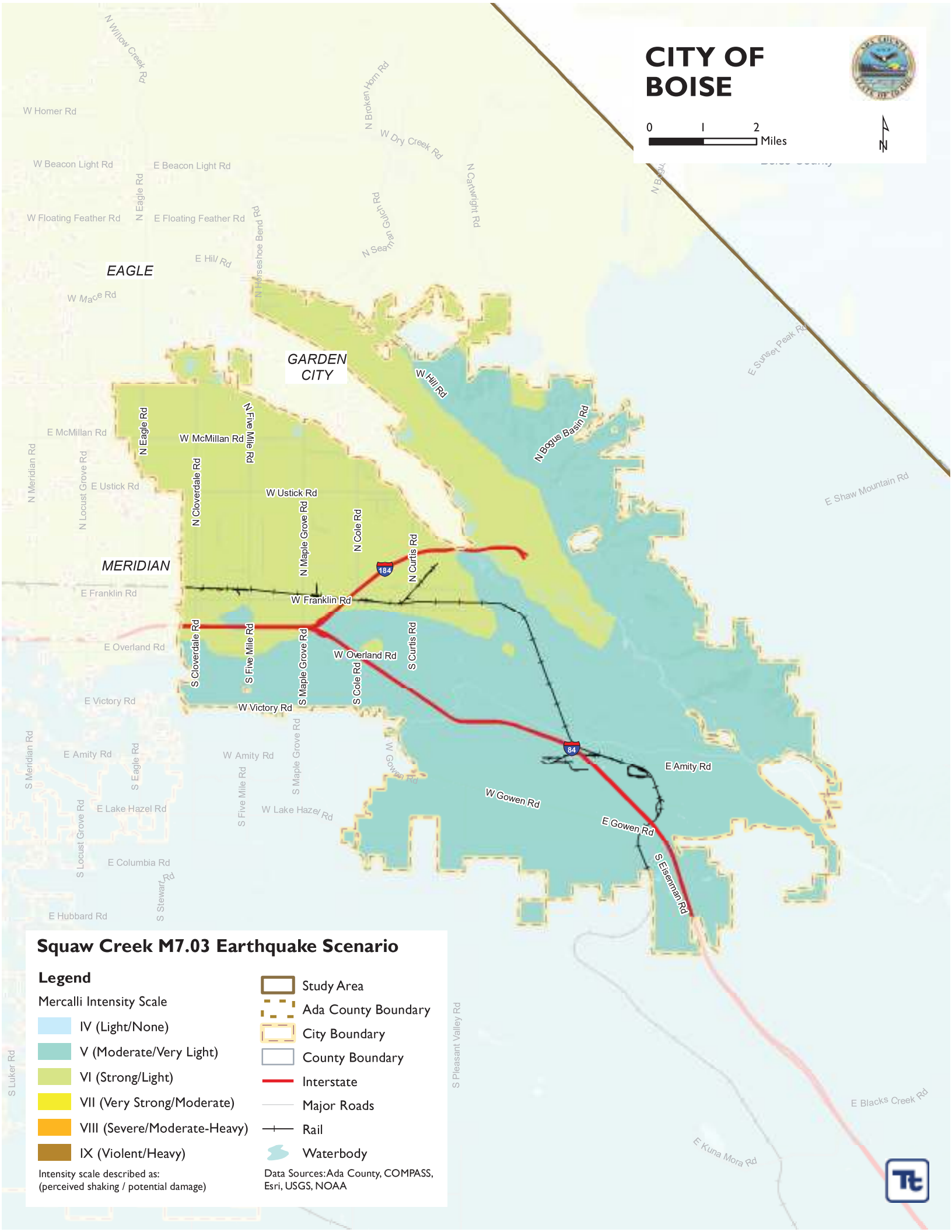


E Kuna Mora Rd

CITY OF BOISE



0 1 2 Miles



Squaw Creek M7.03 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
 - V (Moderate/Very Light)
 - VI (Strong/Light)
 - VII (Very Strong/Moderate)
 - VIII (Severe/Moderate-Heavy)
 - IX (Violent/Heavy)
- Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

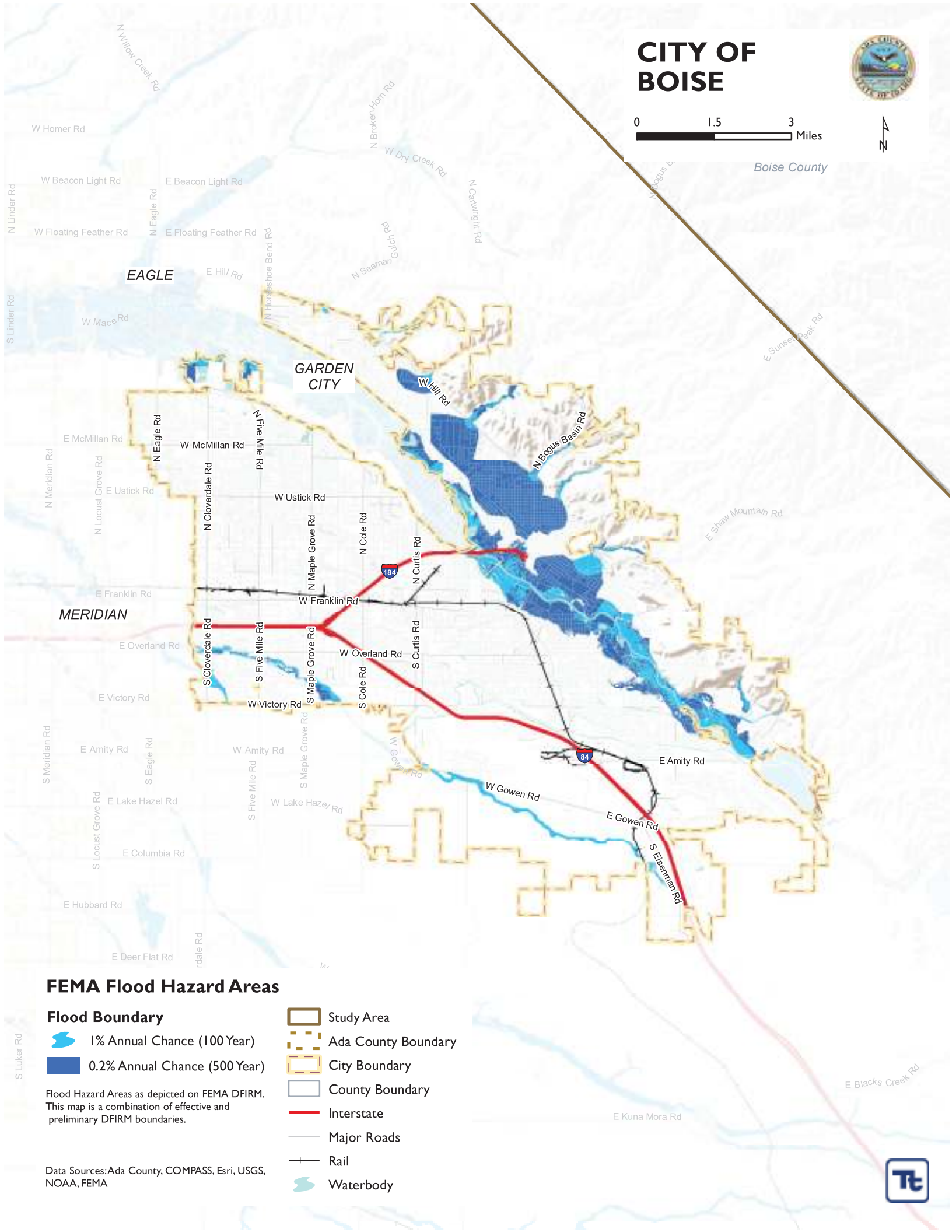
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF BOISE





Boise County





FEMA Flood Hazard Areas

Flood Boundary

-  1% Annual Chance (100 Year)
-  0.2% Annual Chance (500 Year)

Flood Hazard Areas as depicted on FEMA DFIRM. This map is a combination of effective and preliminary DFIRM boundaries.

-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

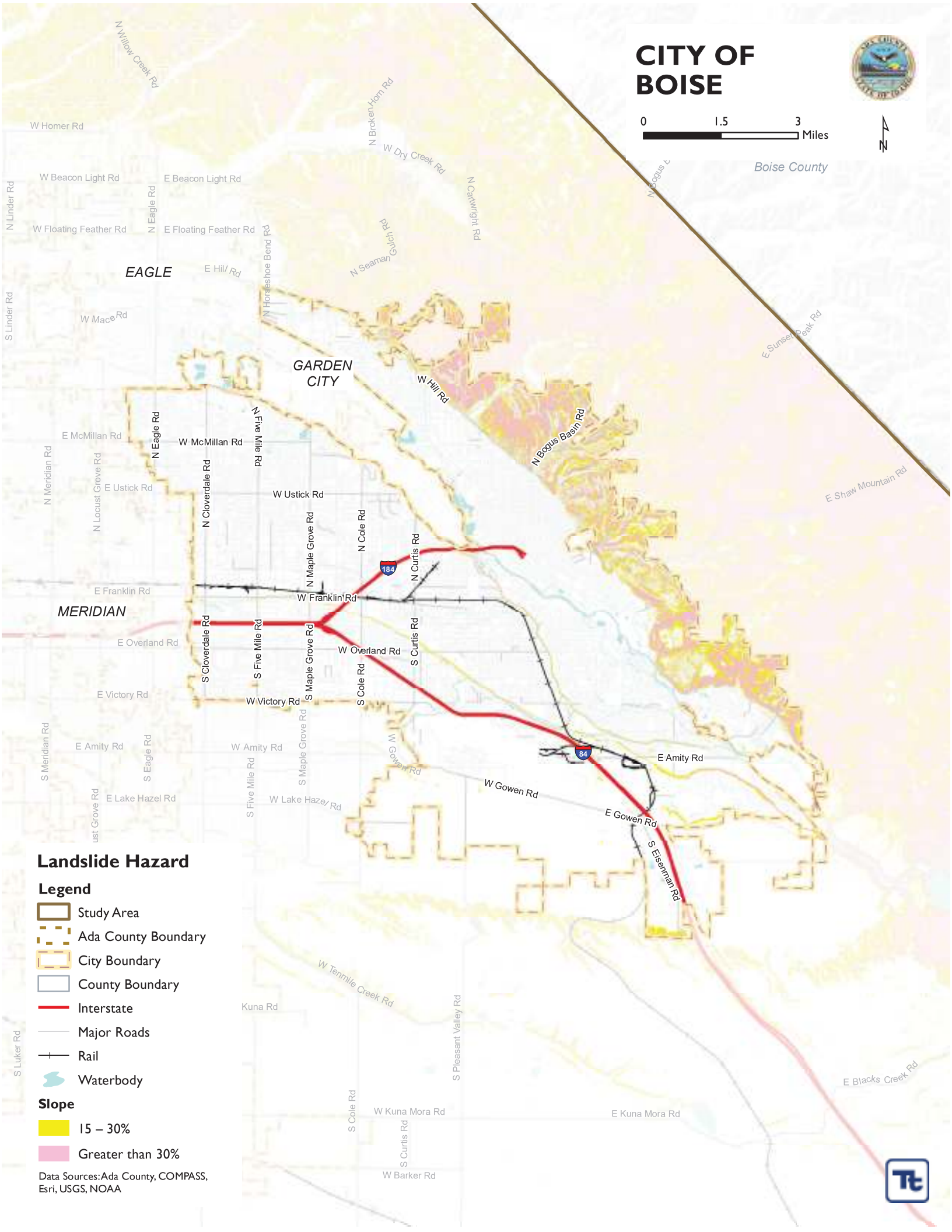
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, FEMA



CITY OF BOISE



Boise County



Landslide Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Slope

- 15 – 30%
- Greater than 30%

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



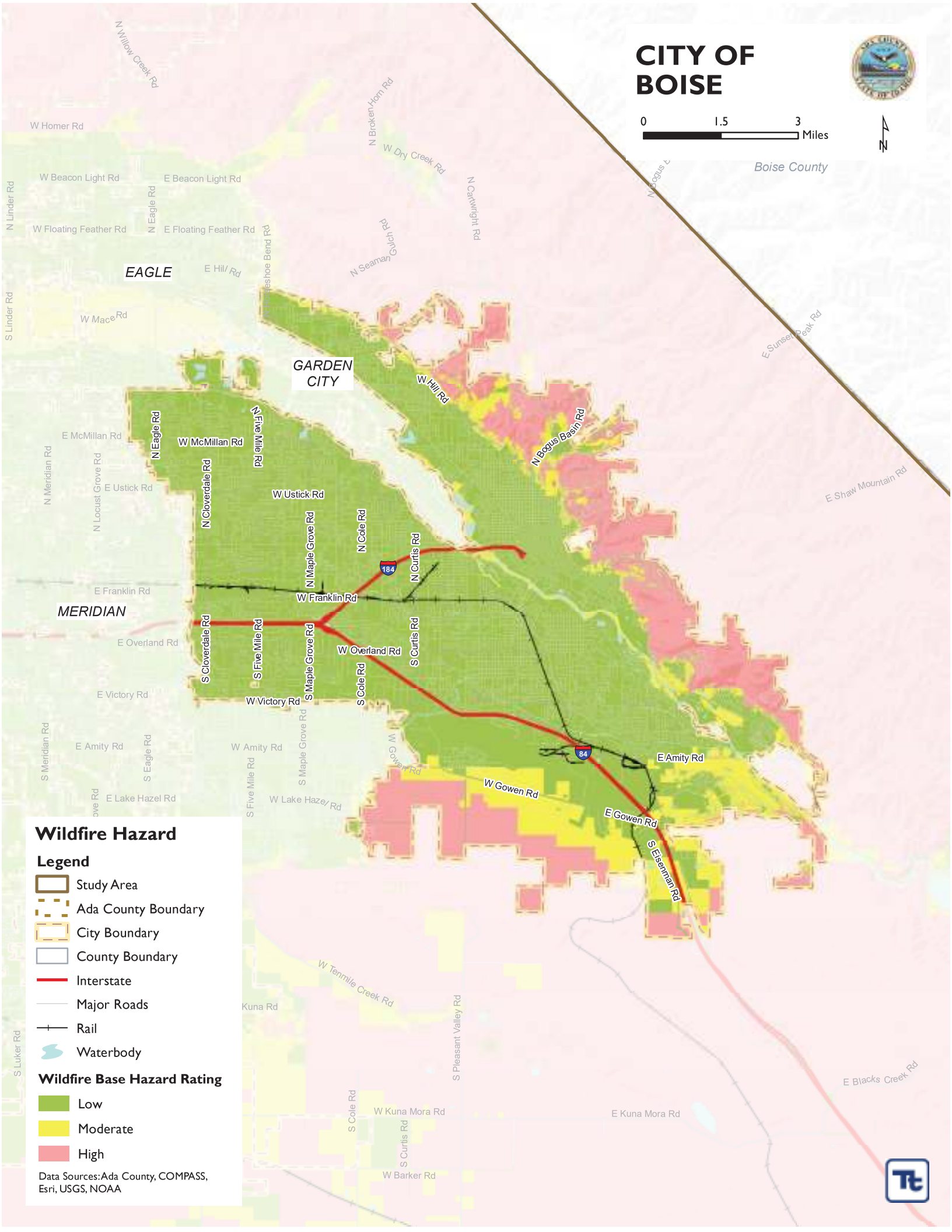
CITY OF BOISE



0 1.5 3 Miles



Boise County



Wildfire Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Wildfire Base Hazard Rating

- Low
- Moderate
- High

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



3. CITY OF EAGLE

3.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Michael Williams, CFM, Floodplain Administrator/Planner III
660 East Civic Lane
Eagle, Idaho 83616
Telephone: 208-489-8774
e-mail Address: mwilliams@cityofeagle.org

Alternate Point of Contact

Morgan Bessaw, CFM, Planner II
660 East Civic Lane
Eagle, Idaho 83616
Telephone: 208-489-8776
e-mail Address: mbessaw@cityofeagle.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 3-1.

Table 3-1. Local Hazard Mitigation Planning Team Members

Name	Title
Michael Williams, CFM	Floodplain Administrator
Morgan Bessaw, AICP, CFM	Planner II

3.2 JURISDICTION PROFILE

3.2.1 Location and Features

The City of Eagle covers approximately 31 square miles, with elevation range from 2,566 feet to 3,100 feet. Strategically placed between the Boise foothills and the Boise River, Eagle has much to offer in the way of walking, horse and bike riding, a state-of-the-art skateboard park, ponds, and other water amenities. With the intersection of the state’s primary north-south highway (Highway 55) and a major east-west route (Highway 44) located in Eagle, access to and from the community is efficient and diverse.

Eagle, Idaho climate is warm during summer when temperatures tend to be in the 70s and very cold during winter when temperatures tend to be in the 30s. The warmest month of the year is July with an average maximum temperature of 87.60 degrees Fahrenheit, while the coldest month of the year is January with an average minimum temperature of 22.00 degrees Fahrenheit. Temperature variations between night and day tend to be relatively big during summer with a difference that can reach 31 degrees Fahrenheit, and fairly limited during winter with an average difference of 15 degrees Fahrenheit. The annual average precipitation at Eagle is 19.20 inches. Rainfall in is fairly evenly distributed throughout the year. The wettest month of the year is March with an average rainfall of 2.24 inches.

3.2.2 History

The City of Eagle was incorporated on May 27, 1971. Eagle’s early history was set in motion when gold was discovered in the Boise Basin in 1862, as well as in other Idaho mountain locations farther north. Many chose to seek their fortune mining, but a select few came to understand that the mining towns desperately needed the agricultural products that were fast becoming the mainstay of Boise and its river valley to the west, and they centered their efforts on those needs.

3.2.3 Governing Body Format

Eagle is governed by a mayor/council form of government, with four elected council members and an elected mayor. The City Council is responsible for the adoption of this plan, the mayor is responsible for its implementation.

3.3 CURRENT TRENDS

3.3.1 Population

According to COMPASS, the population of the City of Eagle as of April 2022 was 33,960. Since 2017, the population has grown at an average annual rate of 5.2 percent.

3.3.2 Development

Single family housing still is still the most common development, however, multi-family development, and commercial development is increasing in Eagle.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 3-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 3-2. Recent and Expected Future Development Trends

Criterion	Response
<p>Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i></p>	<p>Yes 851-acres containing approximately 15 structures. Most of the parcels were annexed to develop residential subdivisions.</p>
<p>Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i></p>	<p>Yes Primarily the foothills north of the city. The dominant use will be single-family residential Ada County, Boise County, and Gem County</p>
<p>Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i></p>	<p>Yes The city is experiencing exponential growth along with the other cities located within the Treasure Valley. The city anticipates the growth will continue through the next HMP timeframe. Some of the area where the City is anticipating growth is located within an area without base flood elevations. The area is currently being studied for submittal of a Conditional Letter of Map Revision (CLOMR).</p>

Criterion	Response					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	2016	2017	2018	2019	2020	
	Single Family	494	670	699	492	523
	Multi-Family	0	18	9	18	1
	Other	23	26	18	33	11
	Total	517	714	726	543	535
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> • Special Flood Hazard Areas: 0 • Landslide: 0 <li style="padding-left: 150px;">• High Liquefaction Areas: 0 • Wildfire Risk Areas: 0 					
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	The City does not maintain a buildable lands inventory. However, the City is experiencing exponential growth and anticipates the areas south of the foothills will be built out within the next 10-years.					

3.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 3-3.
- Development and permitting capabilities are presented in Table 3-4.
- An assessment of fiscal capabilities is presented in Table 3-5.
- An assessment of administrative and technical capabilities is presented in Table 3-6.
- An assessment of education and outreach capabilities is presented in Table 3-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 3-8.
- Classifications under various community mitigation programs are presented in Table 3-9.

Table 3-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	No	Yes	Yes
<i>Comment: Title 7, Chapter 1, Article A adopts the 2012 International Building Code (IBC). Effective January 1, 2015</i>				
Zoning Code	Yes	No	Yes	Yes
<i>Comment: Title 8, Chapters 1 thru 11. Adopted 4/11/2003</i>				
Subdivisions	Yes	No	No	Yes
<i>Comment: Title 9, Chapters 1 thru 6. Adopted: 11/15/1983</i>				
Stormwater Management	Yes	No	No	No
<i>Comment: Title 9, Chapter 4 (9-4-1-10) includes provisions for drainage. Adopted 1979. *Note-ACHD deploys stormwater standards as they pertain to roads.</i>				
Post-Disaster Recovery	No	No	No	No
<i>Comment:</i>				
Real Estate Disclosure	No	Yes	Yes	No
<i>Comment: Realtor Listing Disclosure Page shows if flood insurance is required.</i>				
Growth Management	Yes	No	No	Yes
<i>Comment: Title 7, Chapter 6 (Ord. 345, 5-11-1999) includes new growth and development</i>				
Site Plan Review	No	No	No	No
<i>Comment:</i>				
Environmental Protection	No	No	No	No
<i>Comment:</i>				
Flood Damage Prevention	Yes	No	No	Yes
<i>Comment: Flood Damage Prevention Ordinance, Title 10. Last amended 7/23/2019</i>				
Emergency Management	No	No	No	No
<i>Comment:</i>				
Climate Change	No	No	No	No
<i>Comment:</i>				
Planning Documents				
General Plan	Yes	No	Yes	Yes
<i>Is the plan equipped to provide linkage to this mitigation plan? Yes</i>				
<i>Comment: City of Eagle Comprehensive Plan adopted 11/15/2017.</i>				
Capital Improvement Plan	Yes	No	No	Yes
<i>How often is the plan updated? Yearly</i>				
<i>Comment: City of Eagle FY 2021-2025 Capital Plan Adopted October 27, 2020, Resolution 20-25</i>				
Disaster Debris Management Plan	No	No	No	No
<i>Comment:</i>				
Floodplain or Watershed Plan	Yes	No	No	Yes
<i>Comment: The 2022 Ada County Multi-Hazard Mitigation Plan will qualify as a flood hazard management plan under CRS criteria upon its completion and adoption.</i>				
Stormwater Plan	No	No	No	No
<i>Comment:</i>				
Urban Water Management Plan	No	No	No	No
<i>Comment:</i>				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Habitat Conservation Plan <i>Comment:</i>	No	No	No	No
Economic Development Plan <i>Comment: Economic Development component added as part of the Comprehensive Plan</i>	Yes	No	No	Yes
Shoreline Management Plan <i>Comment:</i>	No	No	No	No
Community Wildfire Protection Plan <i>Comment: The 2022 Ada County Multi-Hazard mitigation Plan is being prepared as a CWPP for the Ada County planning area.</i>	Yes	No	No	No
Forest Management Plan <i>Comment:</i>	No	No	No	No
Climate Action Plan <i>Comment:</i>	No	No	No	No
Comprehensive Emergency Management Plan <i>Comment:</i>	No	No	No	No
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment: EMCR has prepared and maintains a THIRA for the Ada county operational area</i>	Yes	No	No	Yes
Post-Disaster Recovery Plan <i>Comment:</i>	No	No	No	No
Continuity of Operations Plan <i>Comment:</i>	No	No	No	No
Public Health Plan <i>Comment: Central District Health Department Emergency Operations Plan, 2013</i>	No	Yes	No	No

Table 3-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i>	Yes Planning and Zoning Department
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	No

Table 3-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify:</i> Water	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 3-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Eagle Planning and Zoning	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Eagle Building Department	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Floodplain Administrator	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Eagle Planning and Zoning	Yes
Surveyors <i>If Yes, Department /Position:</i>	No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> IT Department, GIS Technician	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Can contract for service	Yes
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management	Yes
Grant writers <i>If Yes, Department /Position:</i> Steve Noyes, Trails and Pathways Superintendent	Yes
Other <i>If Yes, Department /Position:</i>	No

Table 3-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes (Ellen Mattila)
Do you have personnel skilled or trained in website development?	Yes (Ellen Mattila)
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Floodplain Information	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Ada County & City Social Media	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Planning & Zoning, Comprehensive Plan	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Website, email blast, PSA	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 3-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Eagle Planning and Zoning
Who is your floodplain administrator? (department/position)	Mike Williams, CFM, Planning and Zoning, Planner III
Are any certified floodplain managers on staff in your jurisdiction?	Yes (Mike Williams/Morgan Bessaw)

Criterion	Response
What is the date that your flood damage prevention ordinance was last amended?	07/23/2019
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> Higher Standards	Exceed
When was the most recent Community Assistance Visit or Community Assistance Contact?	10/2020
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i>	No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i>	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i>	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> Continuing Education	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> Yes <i>If no, is your jurisdiction interested in joining the CRS program?</i>	Yes
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> \$113,010,600 <i>What is the premium in force?</i> \$209,571	312
How many total loss claims have been filed in your jurisdiction? ^a <i>What were the total payments for losses?</i> \$198,703	15

a. According to FEMA statistics as of March 31, 2022

Table 3-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	1600120380	N/A
DUNS #	Yes	024950599	N/A
Community Rating System	Yes	7	07/19/2021
Building Code Effectiveness Grading Schedule	Yes	C3/R4	N/A
Public Protection	Yes	3/9	N/A
Storm Ready	Yes	Participant	N/A
Firewise	No	N/A	N/A

3.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

3.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Eagle Comprehensive Plan, Chapter 6
- Eagle Comprehensive Plan, Chapter 7
- Eagle Comprehensive Plan, Chapter 11

3.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- All future updates to the City of Eagle Comprehensive Plan—the comprehensive plan will continue to use hazard mapping and hazard data in updates of the land use, hazard areas, and implementation chapters.
- Future Emergency Operation Plan updates for the City of Eagle—updates to the EOP will consider the natural and human-caused hazards in this HMP when developing strategies for emergency operations.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

3.6 RISK ASSESSMENT

3.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 3-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

3.6.2 Hazard Risk Ranking

Table 3-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 3-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	1/20/2020-present	unknown
Flooding	DR-4342	3/29/2017-06/15/2017	Countywide: \$4,493,792
Rain on Snow Flood	N/A	2012	N/A
Wildfire	N/A	07/28/2010	\$7,000,000
Wildland Fire	N/A	07/11/2010	N/A
Wildland Fire	N/A	08/29/2009	N/A
Severe Storm	N/A	01/02/2009	N/A
Wildland Fire	N/A	09/18/2008	N/A
Wildland Fire	N/A	08/08/2006	N/A
Severe Storm	N/A	07/04/2006	N/A
Flood	N/A	6/2006	\$500,000.00
Flood	N/A	6/2006	\$100,000.00
Flood	N/A	1/1-5/1997	No estimates available
Flood	N/A	7/1983	\$50,000

Table 3-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Flood	24	Medium
3	Wildfire	22	Medium
4	Dam/Canal Failure	18	Medium
5	Earthquake	16	Medium
6	Landslide	12	Low
7	Drought	9	Low
8	Volcano	6	Low

3.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 1
- Number of FEMA-identified Severe-Repetitive-Loss Properties: N/A
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Isolation – Some access in and out of the City are on State Highways and ACHD roadways which are located within areas of special flood hazard. These facilities may be impacted during a flood event (ie. bridges) and adjacent roadways which may not allow vehicular access.
- ITD and ACHD roadway drainage facilities may become overburdened and cause flooding in some areas of the City.
- A hospital is located within an area of special flood hazard and may not be accessible during a 1%-chance flood event.
- The Eagle Sewer District wastewater treatment plant is located in close proximity to the river and may be breached during a major flood event.
- Irrigation canal failures – There are several irrigation canals located throughout the City which in the event of a bank failure would cause damage to surrounding properties and structures.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

3.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 3-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 3-12. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action E-1—Partner with Federal Agencies to install electronic flow monitoring stations on the North Channel of the Boise River Eagle Rd Bridge and Dry Creek Drainage at the Eagle Rd Bridge. Both monitoring stations shall be capable of feeding data to USGS stream flow web site, or other applicable collection sources.</p> <p>Comment: <i>No progress</i></p>			✓	E-10
<p>Action E-2—Partner with ACHD on bridge replacement of Dry Creek Bridge @ Floating Feather, w/o Eagle Rd Replacement. Replace structure to increase freeboard reduce restriction on Dry Creek.</p> <p>Comment: <i>Completed in 2018</i></p>	✓			
<p>Action E-3—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to; enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p>Comment: <i>Ongoing</i></p>			✓	E-4
<p>Action E-4—Continue to maintain/enhance the City’s classification under the Community Rating System</p> <p>Comment: <i>Ongoing</i></p>			✓	E-11

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action E-5—Integrate Multi-Hazard Mitigation Plan into future updates to the City of Eagle Comprehensive Plan.</p> <p><i>Comment: Ongoing</i></p>			✓	E-2
<p>Action E-6—Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.</p> <p><i>Comment: Retain as ongoing since the city has a repetitive loss property</i></p>			✓	E-1
<p>Action E-7—Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.</p> <p><i>Comment: Ongoing – working on wildland urban interface ordinance</i></p>			✓	E-12
<p>Action E-8—Consider the formation of a Surface Water Utility district and/or a Capital Improvements program for drainage, as a method of funding the mitigation of stormwater impacts created by new development.</p> <p><i>Comment: Remove – ACHD jurisdiction</i></p>		✓		
<p>Action E-9—Partner with other appropriate agencies within the planning area, such as Ada County, in the development of a comprehensive stormwater management plan that will evaluate the projected impacts of future development in the watersheds that impact the City of Eagle and make regional recommendations to mitigate those impacts.</p> <p><i>Comment: Remove – ACHD jurisdiction</i></p>		✓		
<p>Action E-10—Support County-wide initiatives identified in Volume 1.</p> <p><i>Comment: Ongoing</i></p>			✓	E-13
<p>Action E-11—Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.</p> <p><i>Comment: Ongoing</i></p>			✓	E-3
<p>Action E-12—In partnership with Eagle Fire Protection district, continue to support wildfire mitigation projects such as those sponsored by the Healthy Hills initiative within the eagle City limits or urban growth area.</p> <p><i>Comment: Working with Eagle Fire Protection District on a Wildland Urban Interface Ordinance</i></p>			✓	E-7
<p>Action E-13—Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.</p> <p><i>Comment: Working with Karl Gebhardt from Natural Resources Inc.</i></p>			✓	E-8

3.8 HAZARD MITIGATION ACTION PLAN

Table 3-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 3-14 identifies the priority for each action. Table 3-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 3-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action E-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide</p>						
Existing	3, 8, 9	Eagle Planning & Zoning	EMCR	High	HMGP, BRIC, FMA, Increased Cost of Compliance (ICC)	Short-term
<p>Action E-2—Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including updates to the City of Eagle Comprehensive Plan.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide</p>						
New & Existing	2, 5, 6	Eagle Planning & Zoning	N/A	Low	Staff Time, General Funds	Ongoing
<p>Action E-3—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide, Drought, Volcano</p>						
New & Existing	All	City of Eagle	EMCR	Low	Staff Time, General Funds	Short-term
<p>Action E-4—Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:</p> <ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. <p><u>Hazards Mitigated:</u> Flood</p>						
New & Existing	2, 3, 4, 6, 8, 9	City of Eagle	N/A	Low	Staff Time, General Funds	Ongoing
<p>Action E-5—Identify and pursue strategies to increase adaptive capacity to climate change.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Drought</p>						
New & Existing	2, 3, 4, 6, 9, 10	City of Eagle		Low	Staff Time, General Funds	Short-term
<p>Action E-6— Purchase generators for critical facilities and infrastructure that lack adequate backup power, including Lexington Hills well.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Earthquake, Drought</p>						
Existing	1, 6, 10	City Water Department		Med	Staff Time, General Funds, HMBP, BRIC	Ongoing
<p>Action E-7—In partnership with Eagle Fire Protection District, Middleton Rural Fire District, and Star Fire Protection District, continue to support wildfire mitigation projects such as those sponsored by the Healthy Hills Initiative within the Eagle city limits or urban growth area. (Coordinates with Eagle Fire Protection District Action EFD-10, Star Joint Fire Protection District Action SFD-6)</p> <p><u>Hazards Mitigated:</u> Wildfire</p>						
New & Existing	2, 4, 5, 6, 7, 8, 9	City of Eagle	Eagle Fire Protection, Middleton Rural Fire District, Star Fire Protection District	Low	Staff Time, HMGP, BRIC	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action E-8—Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Dam/Canal Failure</p>						
New & Existing	2, 4, 5, 6, 8	City of Eagle	EMCR, Fire Departments, USACE	Low	Staff Time, HMG, BRIC	Ongoing
<p>Action E-9—Develop a Joint Emergency Operation Plan with Eagle City, Eagle Sewer District, and Eagle Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Eagle will lead this all-discipline action, but Eagle Sewer District and Eagle Fire District will aid in planning for all hazards. (Coordinates with Eagle Sewer District Action ESD-7 and Eagle Fire Protection District EFD-8)</p> <p><u>Hazards Mitigated:</u> All Hazards</p>						
New and Existing	All	City of Eagle	Eagle Sewer District, Eagle Fire District	Medium	City Funds, District Funds, HMGP	Short-term
<p>Action E-10— Partner with Federal Agencies to install electronic flow monitoring stations on the North Channel of the Boise River Eagle Rd Bridge at the Eagle Rd Bridge. Both monitoring stations shall be capable of feeding data to USGS stream flow web site, or other applicable collection sources.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Dam/Canal Failure</p>						
New and Existing	2, 7, 8, 9	City of Eagle	Eagle Fire District, EMCR, Federal Partners	Medium	FMA, BRIC, Local Funding	Short-term
<p>Action E-11— Continue to maintain/enhance the City’s classification under the Community Rating System</p> <p><u>Hazards Mitigated:</u> Flood</p>						
New and Existing	2, 3, 4, 6, 8, 9	City of Eagle		Low	General Funds	Ongoing
<p>Action E-12— Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide, Drought</p>						
New and Existing	4, 6	Eagle Planning and Zoning		Low	General Funds	Short-term
<p>Action E-13— Support County-wide initiatives identified in Volume 1.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide, Drought, Volcano</p>						
New and Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	City of Eagle	EMCR	Low	General Funds, Staff Time	Ongoing
<p>Action E-14— Create green infrastructure and alternate transportation routes by constructing a trail system alongside canals that will connect to the larger pathway that adjoins the Boise River. This system will provide additional routes for bicyclists who already use the current pathways as alternate transportation, which will reduce road congestion and vehicle emissions while allowing access to monitor, maintain, and repair canal systems as needed.</p> <p><u>Hazards Mitigated:</u> Dam/Canal Failure</p>						
New and Existing	6, 9	City of Eagle		High	General Funds, Grant Funding	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 3-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	No	Yes	High	Low
3	3	Low	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	6	Medium	Low	Yes	No	Yes	High	Low
6	3	High	Medium	Yes	Yes	No	Medium	High
7	7	Medium	Low	Yes	Yes	No	Medium	Medium
8	5	Medium	Low	Yes	Yes	No	Medium	Medium
9	10	Low	Low	Yes	Yes	Yes	High	Medium
10	4	Low	Medium	No	Yes	No	Low	Medium
11	6	Medium	Low	Yes	No	Yes	High	Low
12	2	Medium	Low	Yes	No	Yes	High	Low
13	10	Low	Low	Yes	No	Yes	High	Low
14	2	Low	High	No	Yes	No	Low	Medium

a. See the introduction to this volume for explanation of priorities.

Table 3-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather	E-12	E-1			E-6		E-5	E-2, 3, 8, 9, 10, 13
Medium-Risk Hazards								
Flood	E-4, 11, 12	E-1, 11	E-4				E-5	E-2, 3, 4, 8, 9, 10, 13
Wildfire	E-12	E-1		E-7			E-5	E-2, 3, 9, 10, 13
Dam/Canal Failure	E-12	E-1		E-14		E-14		E-2, 3, 7, 8, 9, 10, 13, 14
Earthquake	E-12	E-1			E-6			E-2, 3, 9, 13
Landslide	E-12	E-1						E-2, 3, 9, 13
Drought	E-12				E-6		E-5	E-3, 9, 13
Volcano								E-3, 9, 13

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

3.9 PUBLIC OUTREACH

Table 3-16 lists public outreach activities for this jurisdiction.

Table 3-16. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Meeting with Banbury HOAs	03/17	100+
Flood Insurance Rate Map Information (Realtors, Lending Institutions)	01/18	100+
Property owners within ASFH	01/20	50
Property owners within ASFH	01/21	50

3.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **City of Eagle Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of Eagle Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.

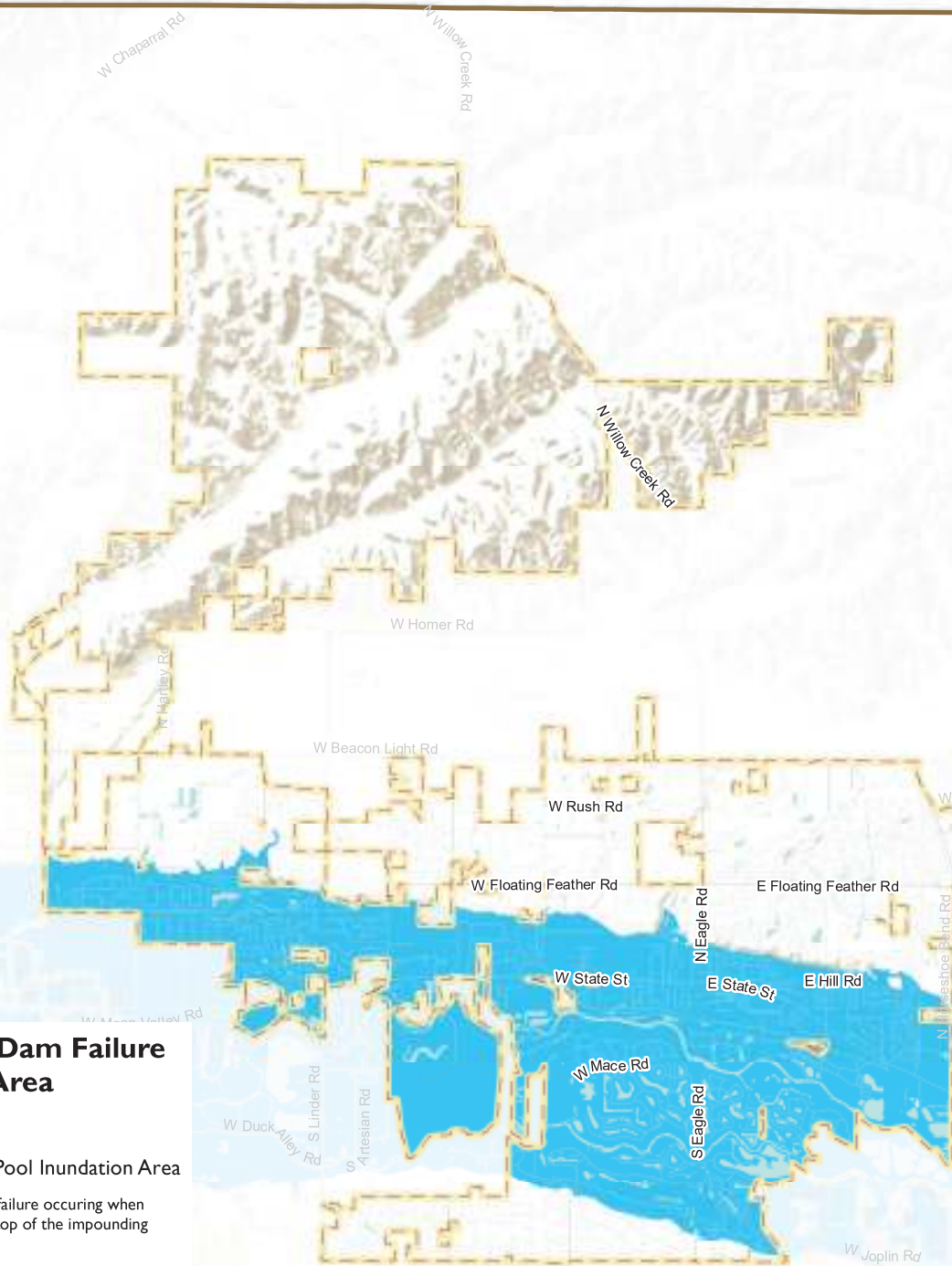
The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

CITY OF EAGLE



Gem County



Lucky Peak Dam Failure Inundation Area

Legend

Maximum Pool Inundation Area

Area inundated by dam failure occurring when pool elevation is at the top of the impounding structure.

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

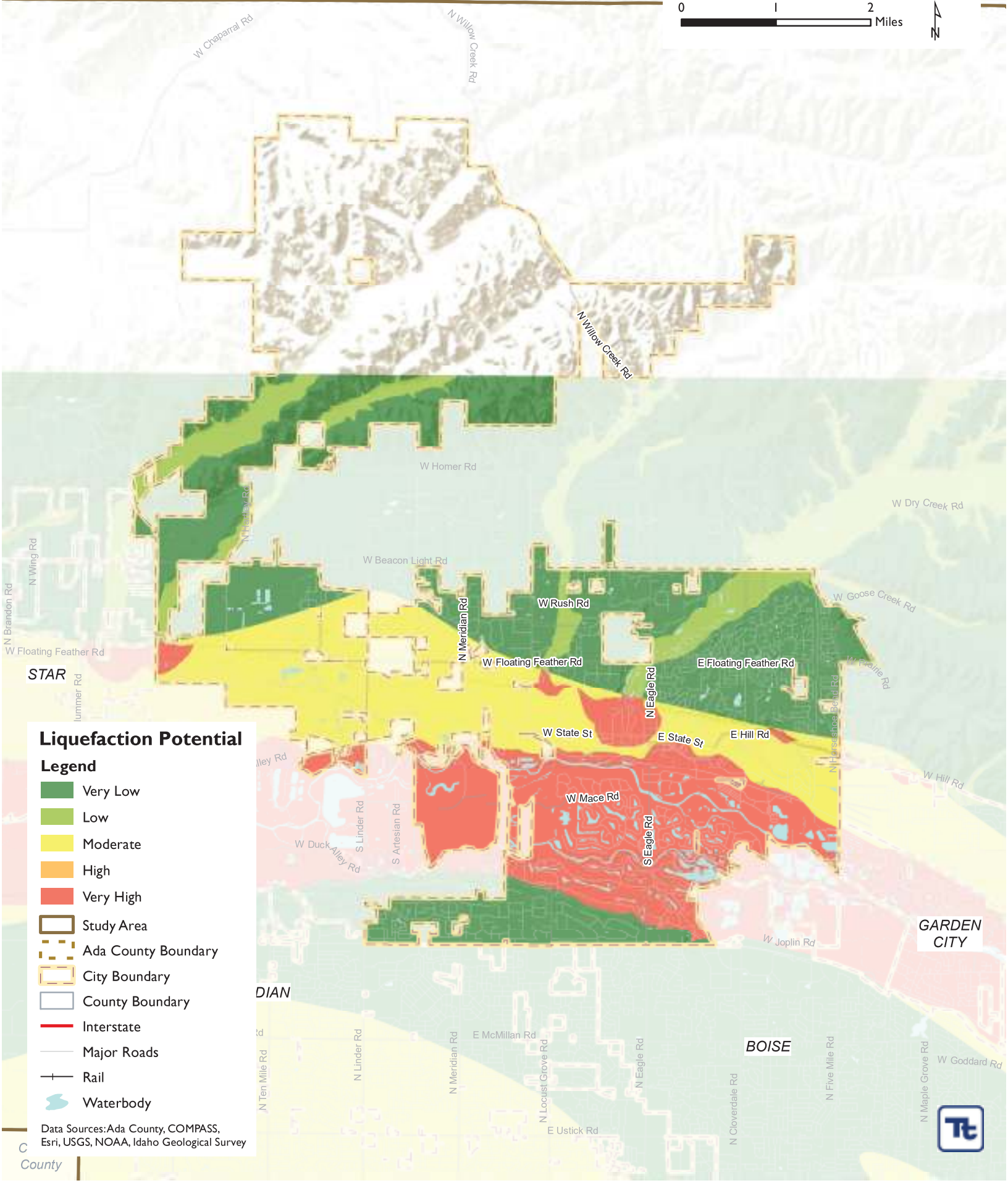
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, IDWR

GARDEN CITY

MERIDIAN

BOISE





Liquefaction Potential

Legend

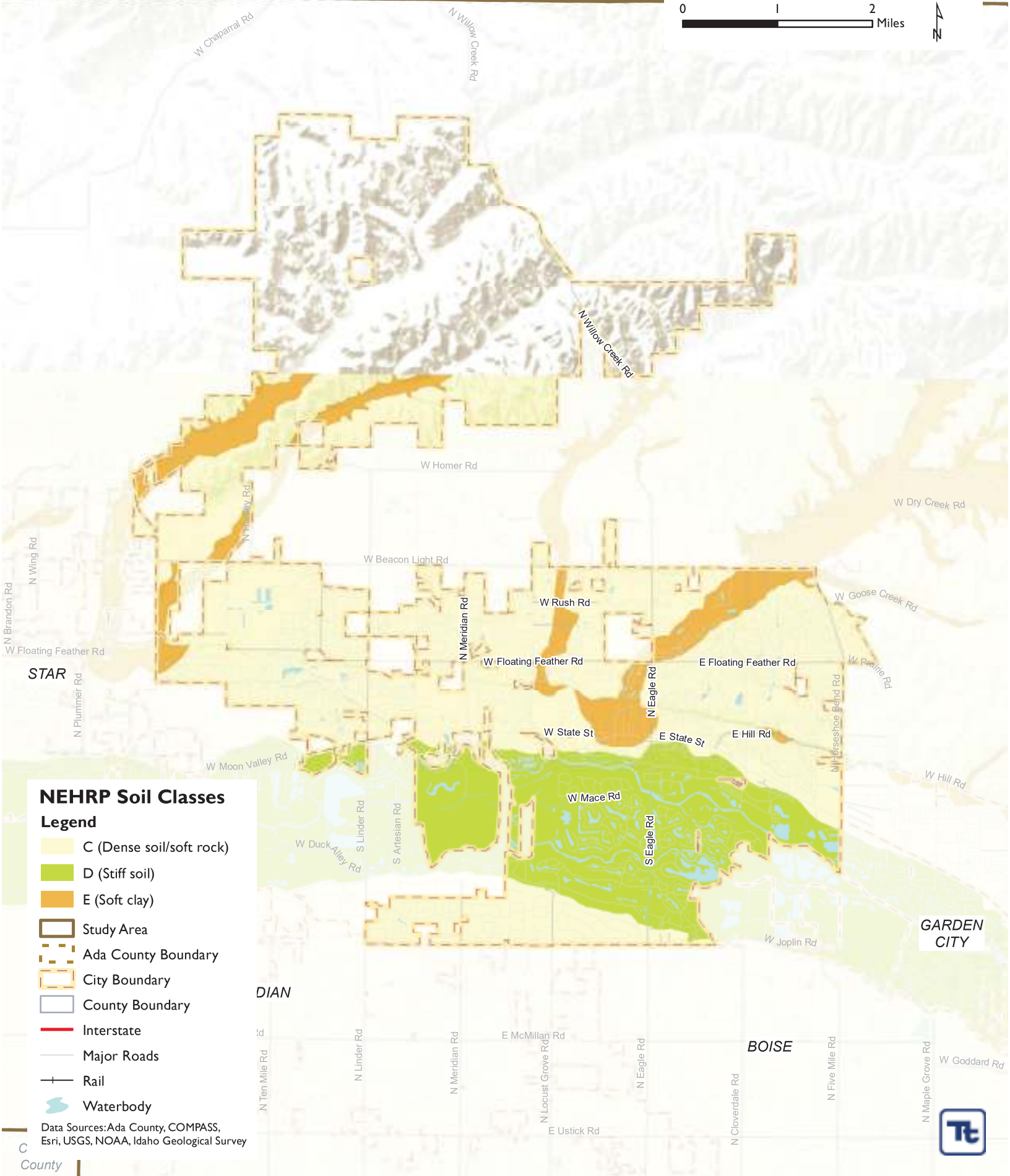
- Very Low
- Low
- Moderate
- High
- Very High
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey

GARDEN CITY

BOISE





NEHRP Soil Classes Legend

- C (Dense soil/soft rock)
- D (Stiff soil)
- E (Soft clay)
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey

GARDEN CITY

BOISE



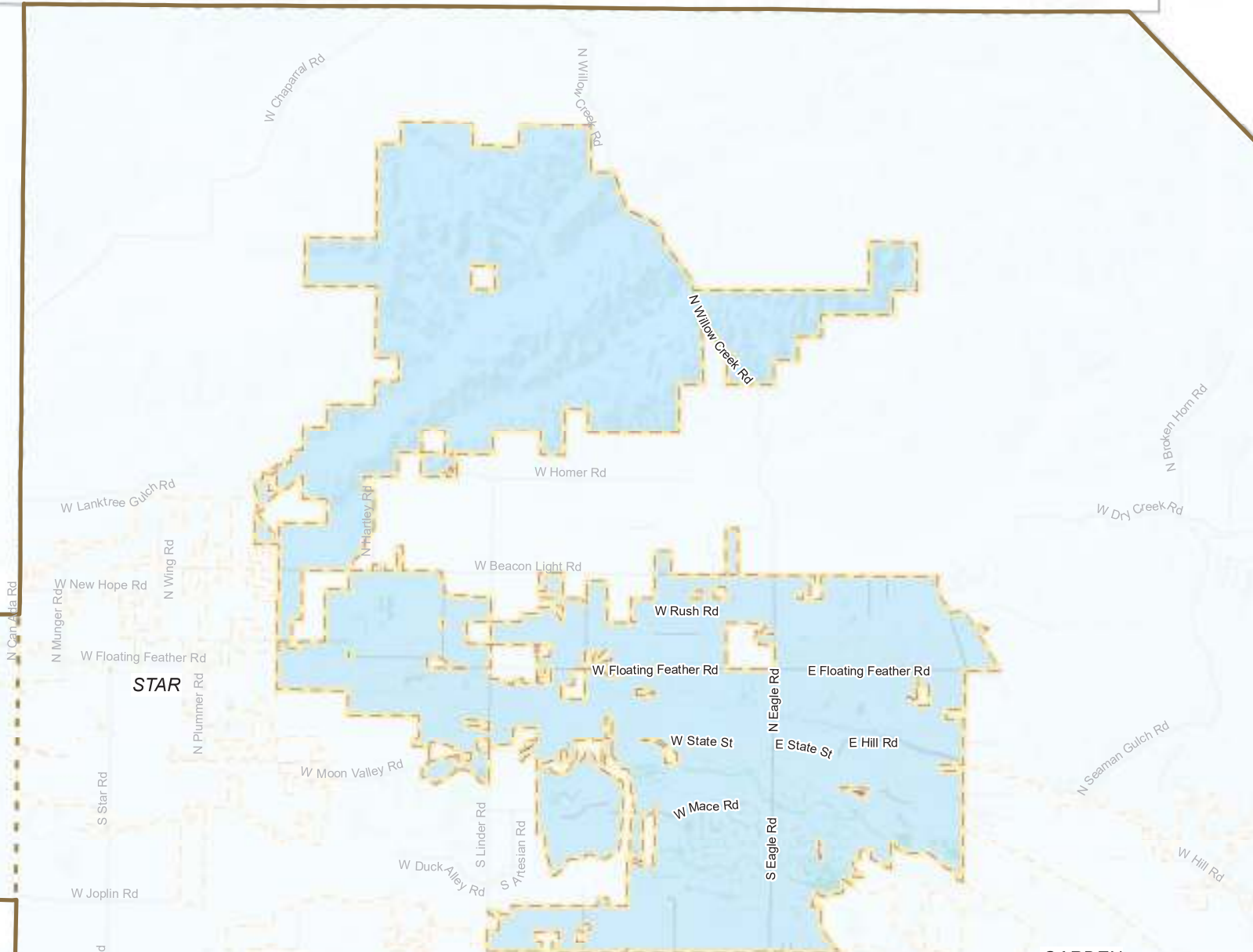
CITY OF EAGLE



Gem County



ounty



100-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



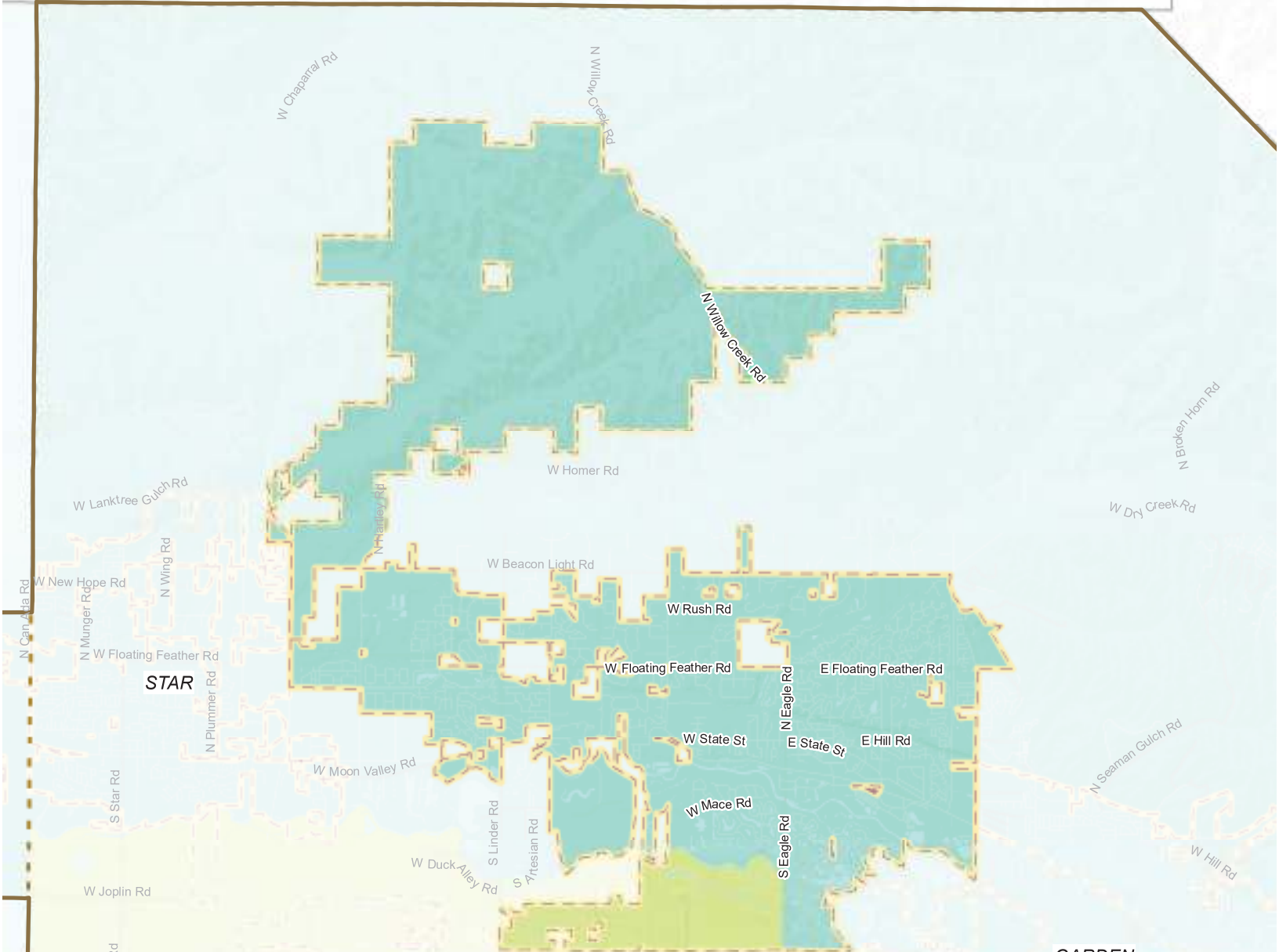
CITY OF EAGLE



Gem County



unity



500-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

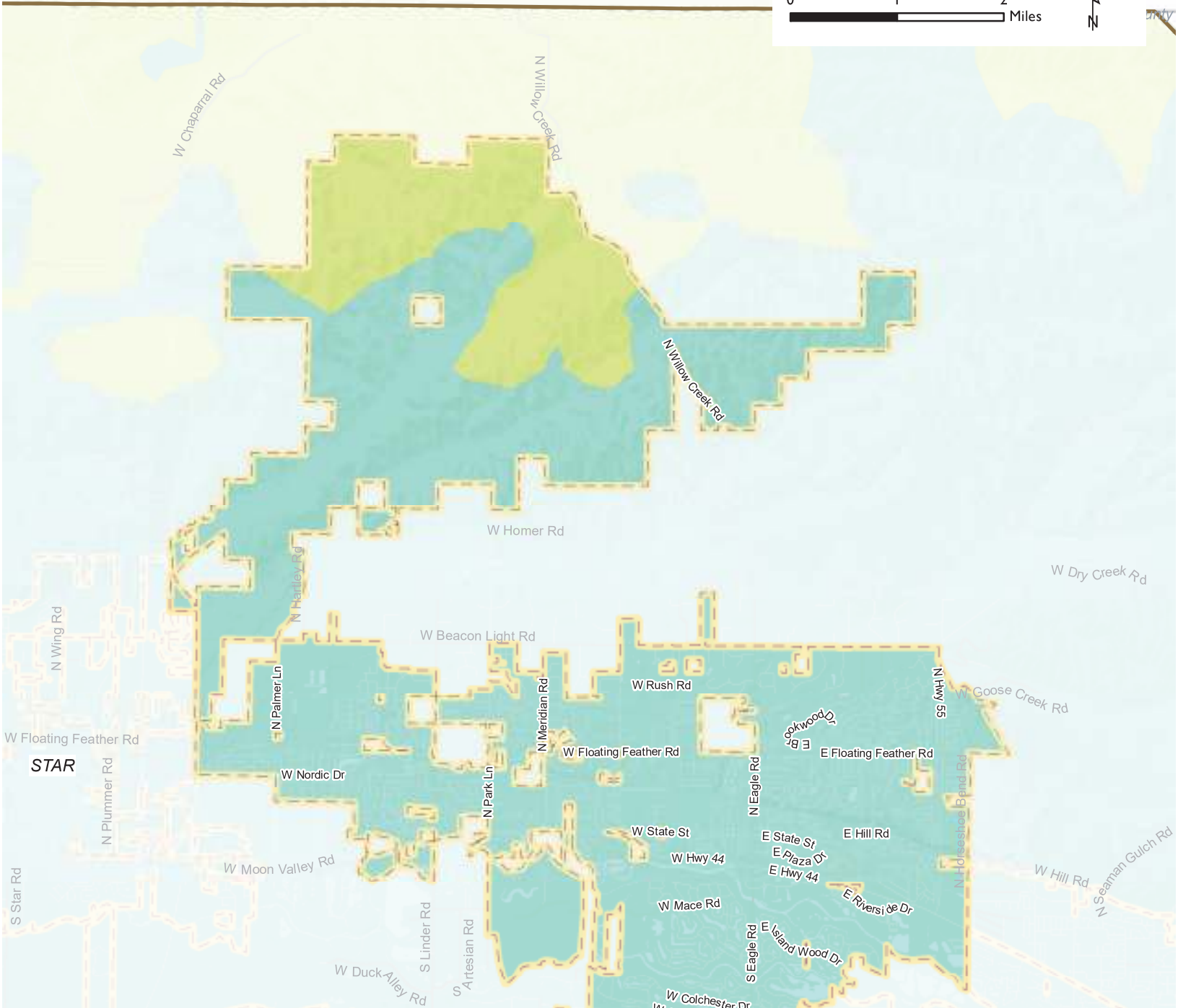
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- | Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

GARDEN CITY

BOISE





Big Flat-Jake Creek M6.81 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

GARDEN CITY

BOISE



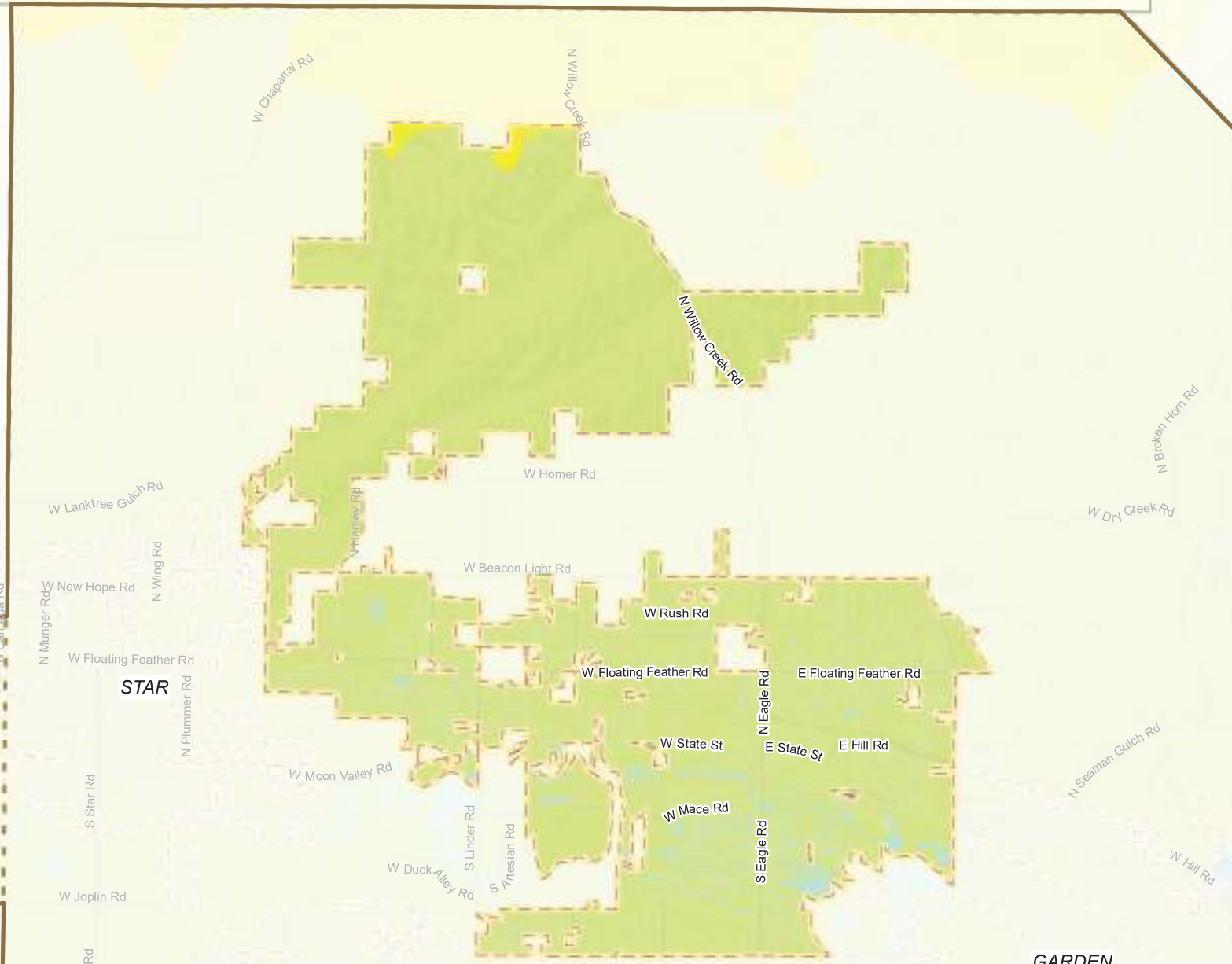
CITY OF EAGLE



Gem County



ounty



Squaw Creek M7.03 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

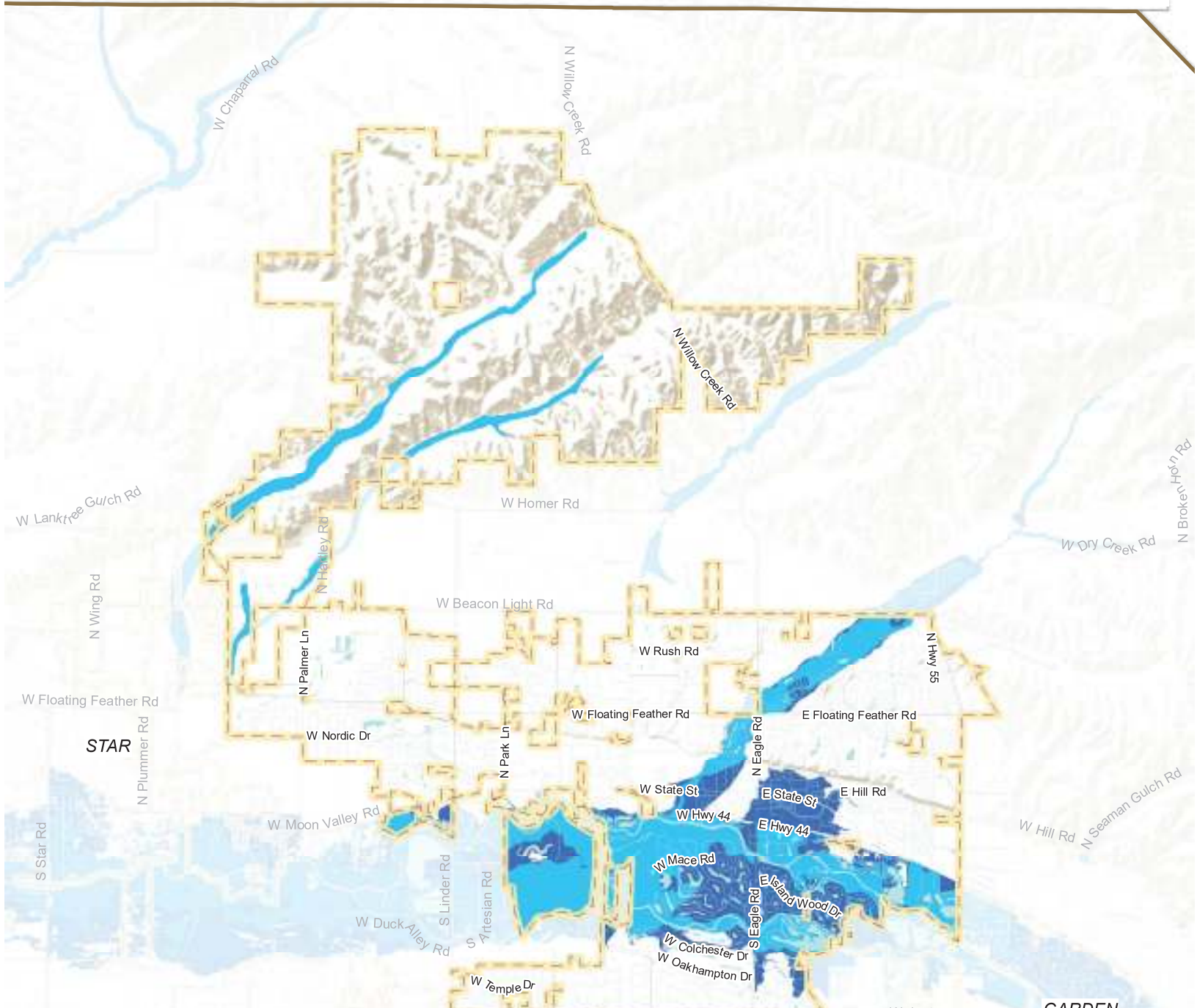
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

GARDEN CITY

BOISE





FEMA Flood Hazard Areas

- Flood Boundary**
- 1% Annual Chance (100 Year)
- 0.2% Annual Chance (500 Year)

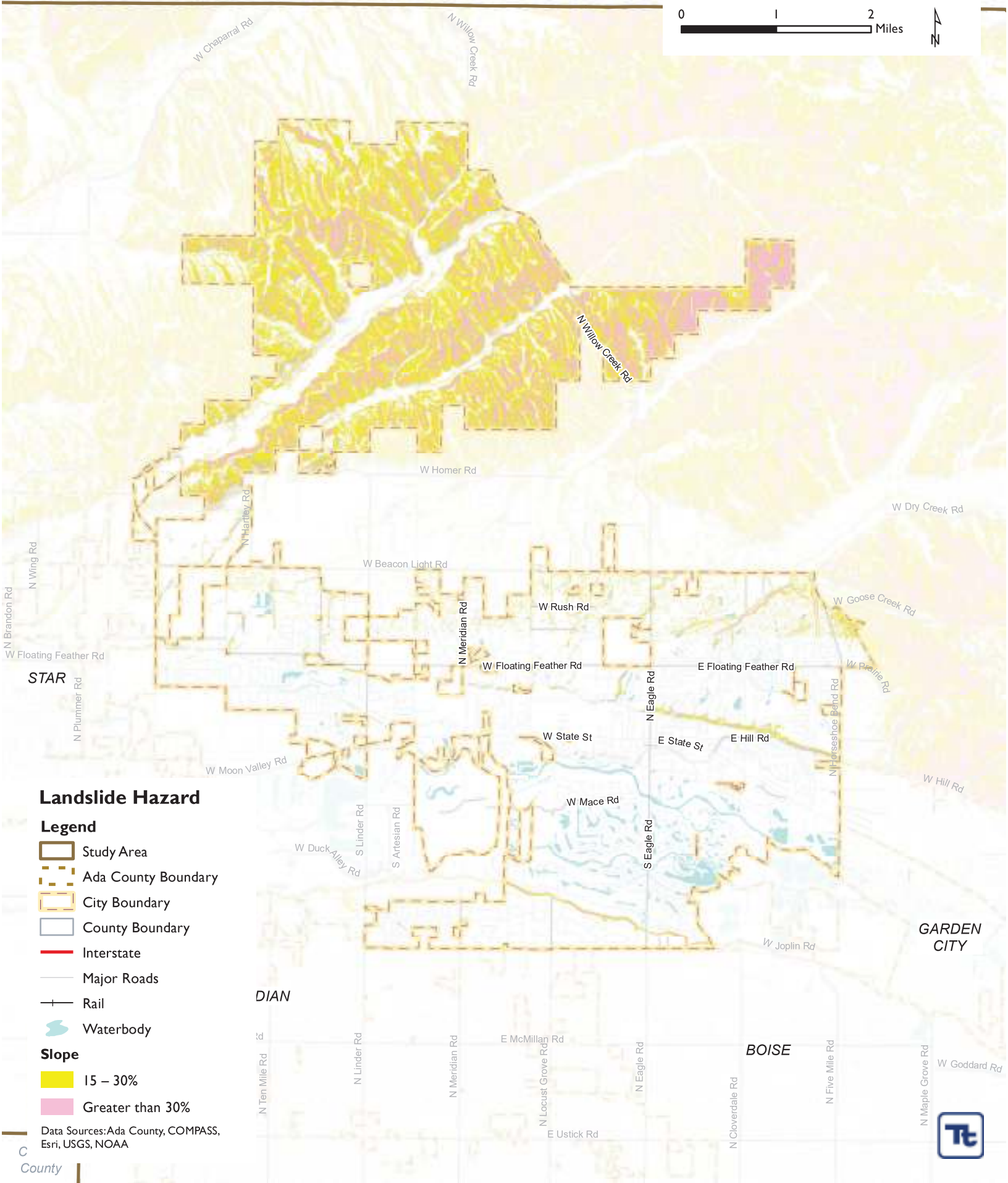
Flood Hazard Areas as depicted on FEMA DFIRM. This map is a combination of effective and preliminary DFIRM boundaries.

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, FEMA

Car





Landslide Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Slope

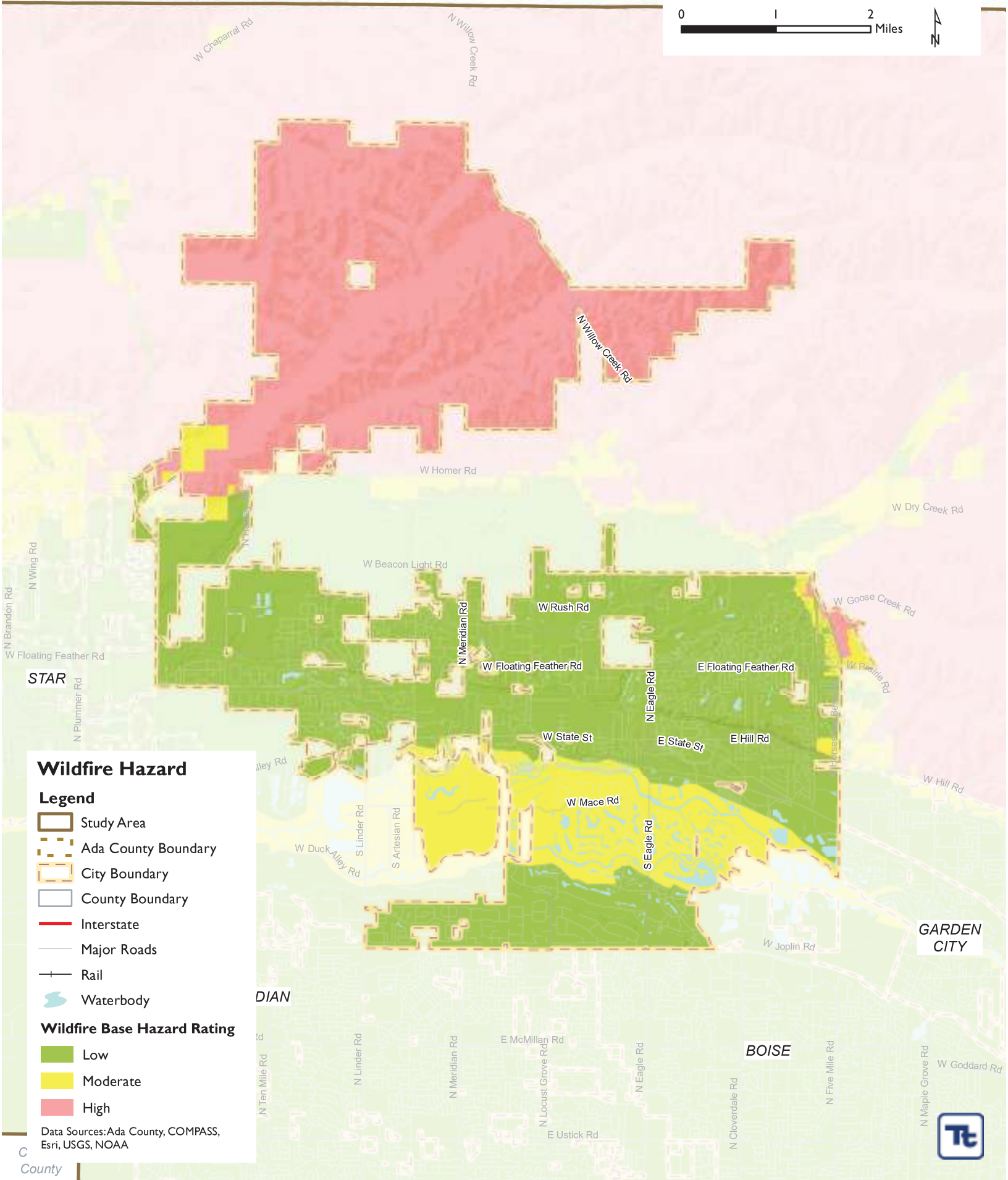
- 15 – 30%
- Greater than 30%

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

GARDEN CITY

BOISE





Wildfire Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Wildfire Base Hazard Rating

- Low
- Moderate
- High

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

GARDEN CITY

BOISE



4. CITY OF GARDEN CITY

4.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Jenah Thornborrow, Development Services Director
6015 N Glenwood
Garden City, ID 83714
Telephone: (208) 472-2924
e-mail Address: jthorn@gardencityidaho.org

Alternate Point of Contact

Colin Schmidt, Public Works Director
6015 N Glenwood
Garden City, ID 83714
Telephone: (208) 472-2949
e-mail Address: cschmidt@gardencityidaho.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 4-1.

Table 4-1. Local Hazard Mitigation Planning Team Members

Name	Title
Colin Schmidt	Public Works Director
Jenah Thornborrow	Development Services Director
Kena Champion	Development Services Administrative Assistant

4.2 JURISDICTION PROFILE

4.2.1 Location and Features

Garden City is nestled between Boise, Meridian, and Eagle lining the north and south banks of the Boise River. City elevations range from 2,550 feet to 2,698 feet, with an average of 2,620.9 feet. Garden City spans over the townships, sections, and ranges; 3N2E05 to 06, 4N1E14, 4N1E23 to 26, 4N1E36, 4N2E19, and 4N2E30 to 32.

Garden City has an average temperature of 52.0°F and receives an average of 12.19 inches of annual precipitation since 1865. Summers are typically warm to hot and dry averaging 71.9°F for June, July, and August since 1865. Winters are generally cold and dry with occasional snow showers averaging 32.5°F for December, January, and February since 1865. Spring and Fall are both mild with light precipitation averaging 51.0°F for March, April, and May and 52.3°F for September, October, and November since 1865.

4.2.2 History

Garden City was incorporated on May 22, 1949. The history of Garden City is tied to the Boise River which runs the length of the city. Native Americans camped on the riverbanks. The higher ground, known as “Government

Island,” was first a temporary military camp and later used by the U.S. Cavalry for pastures. The river often flooded the entire city area to the bench and deposited silt that created the rich agricultural soil.

During the 1920s, Thomas Jefferson Davis bought Government Island for agricultural use. Chinese farmed the area in small gardens, providing produce for residents and miners. Over time, the Chinese were forced out and by the 1940s just two families remained in the area. However, the legacy of the Chinese remains in the name of the city, which is derived from their gardens, and Chinden Boulevard, which was named in a contest, is derived from the “Chinese Garden.”

The “Village of Garden City” was incorporated in 1949 primarily for gambling. The “original townsite” encompassed 100 acres, including the area from 32nd to 37th streets. Before 1949, the area was unincorporated Ada County land. Developers had a vision for duplex housing and filed a subdivision with 50- by 150-foot lots along Chinden and 100- by 300-foot commercial lots. The streets were numbered in different directions to distinguish the area from Boise.

Gambling proceeds made Garden City a boomtown. The next year, annexations doubled the population of the village to approximately 800. Gambling provided funding for sewer, water, and street lighting. Gambling was outlawed by the state Legislature in 1953, and Garden City was expected to go away. Boise coveted Garden City’s liquor license revenues and there were several attempts at disincorporation. But in 1967, the village was chartered as a city. Much of the development of Garden City over the next few decades was a result of few land-use regulations or oversight.

In 2006 there was a large planning effort in the form of a new comprehensive plan and subsequent supportive zoning. This effort garnered considerable public support and supported a revisioning of the city.

The city has grown to incorporate roughly 4 square land miles from the Boise Bench on the south State Street on the north and Horseshoe Bend Road/ Branstetter Road on the west. The city is essentially built out but is in the process of infill development. While at one time the City had a sordid reputation, the City is becoming increasingly popular and is of the highest valued property in the valley.

4.2.3 Governing Body Format

Garden City is governed by a Mayor and four City Council members. There is a Planning and Zoning Commission, Library Board, and Design Review Committee with certain decision-making abilities. Recommending bodies include the Planning and Zoning Commission, Design Review Committee, and Parks and Waterways Committee.

The City Council is responsible for the adoption of this plan, the effected city departments are responsible for its implementation.

4.3 CURRENT TRENDS

4.3.1 Population

According to COMPASS, the population of Garden City as of April 2022 was 13,040. Since 2017, the population has grown at an average annual rate of 2.7 percent.

4.3.2 Development

Garden City sees a mix of commercial and residential uses. There is diversity in the residential stock of housing ranging from affordable to higher-end homes. Traditionally due to lenient zoning standards, much of the nonresidential uses were industrial, and much of the housing in the eastern portion of the city was in mobile/manufactured home parks. The developments north of the river and west of Glenwood are newer and mostly built with commercial uses that enjoy heavy automobile use along the arterials, with residential subdivisions on slightly larger lots that reflect a suburban character with curvilinear streets and cul-de-sacs.

Garden City has an enviable location. It is adjacent to the Boise River, is linked with major transportation arterials, and is close to downtown Boise, the commercial center of the Treasure Valley. While there is very little property available for greenfield development, many properties are under-utilized and ideal for infill development. As the valley continues to spread out and vehicle commuting becomes more difficult, and as trends continue to favor more compact development with a mix of uses, Garden City will continue to become even more desirable. Considering these factors, Garden City provides a market for the redevelopment of under-utilized properties.

Garden City is seeing fewer industrial uses. As the valley grows the housing types are shifting where the city is redeveloping. Many of the properties that were previously mobile/manufactured home communities are being redeveloped. Garden City continues to see an increase in mixed-use development, particularly artisans and small businesses, and increasing residential densities.

Identifying previous and future development trends are achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 1-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 4-2. Recent and Expected Future Development Trends

Criterion	Response																														
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	Yes 6.4 acres vacant at time of annexation. Anticipated to contain 24 lots.																														
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i>	This is market driven TBD If annexed, Garden City																														
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	The city is seeing infill development throughout the City. Flood Hazard risks are anticipated to affect 74% of the City.																														
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Single Family</td> <td>57</td> <td>67</td> <td>33</td> <td>14</td> <td>43</td> </tr> <tr> <td>Multi-Family</td> <td>N/A</td> <td>N/A</td> <td>1</td> <td>3</td> <td>12</td> </tr> <tr> <td>Other</td> <td>7</td> <td>7</td> <td>2</td> <td>3</td> <td>11</td> </tr> <tr> <td>Total</td> <td>64</td> <td>74</td> <td>36</td> <td>20</td> <td>66</td> </tr> </tbody> </table>		2016	2017	2018	2019	2020	Single Family	57	67	33	14	43	Multi-Family	N/A	N/A	1	3	12	Other	7	7	2	3	11	Total	64	74	36	20	66
	2016	2017	2018	2019	2020																										
Single Family	57	67	33	14	43																										
Multi-Family	N/A	N/A	1	3	12																										
Other	7	7	2	3	11																										
Total	64	74	36	20	66																										

Criterion	Response
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> • Special Flood Hazard Areas: There have been 105 permits issued in the floodplain during between 2016-2020. • Landslide: 0 • High Liquefaction Areas: 0 • Wildfire Risk Areas: 0
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	Garden City is predominantly infill development

4.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity-building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 4-3.
- Development and permitting capabilities are presented in Table 4-4.
- An assessment of fiscal capabilities is presented in Table 4-5.
- An assessment of administrative and technical capabilities is presented in Table 4-6.
- An assessment of education and outreach capabilities is presented in Table 4-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 4-8.
- Classifications under various community mitigation programs are presented in Table 4-9.

Table 4-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity ?
Codes, Ordinances, & Requirements				
Building Code	Yes	Yes	Yes	No
<i>Comment:</i> Title 7 of Garden City Code currently adopts the 2018 International Building Code and International Residential Code. This is updated on a three year cycle following the State of Idaho’s requirements . North Ada County Fire and Rescue District is responsible for implementing the fire code, which is also required to be updated on a three year cycle following the State of Idaho’s requirements.				
Zoning Code	Yes	No	Yes	Yes
<i>Comment:</i> Title 8 of Garden City Code. Title 8 is reviewed on a biannual basis.				
Subdivisions	Yes	No	Yes	No
<i>Comment:</i> Title 8-5 of Garden City Code. Title 8 is reviewed on a biannual basis.				
Stormwater Management	Yes	No	No	Yes
<i>Comment:</i> Garden City complies with the requirements as per EPA requirements in NPDES, and Idaho Department of Water Resources (IDWR) requirements				
Post-Disaster Recovery	Yes	No	No	Yes
<i>Comment:</i> Garden City participates in regional planning for mitigation, preparation and recovery through Ada County City Emergency Management & Community Resilience (EMCR)				
Real Estate Disclosure	Yes	No	No	Yes
<i>Comment:</i> This is part of the Floodplain management are required to remain in compliance with FEMA requirements				
Growth Management	Yes	No	No	Yes
<i>Comment:</i> Garden City creates and maintains a Comprehensive Plan to manage growth. Garden City has also adopted the COMPASS CIM projections.				
Site Plan Review	Yes	No	No	Yes
<i>Comment:</i> Garden City conducts a site inspections to ensure compliance with City regulations and codes at the time of redevelopment and through code enforcement actions.				
Environmental Protection	Yes	No	No	Yes
<i>Comment:</i> Title 6 of Garden City Code Last Update 2015				
Flood Damage Prevention	Yes	No	No	Yes
<i>Comment:</i> Titles 7 and 8 of Garden City Code				
Emergency Management	Yes	No	No	Yes
<i>Comment:</i> Police Department				
Climate Change	No	No	No	NA
<i>Comment:</i>				
Other	No	No	No	NA
<i>Comment:</i>				
Planning Documents				
General Plan	Yes	No	Yes	Yes
<i>Is the plan equipped to provide linkage to this mitigation plan?</i> No				
<i>Comment:</i> Garden City creates and maintains a Comprehensive Plan. Amended 2021				
Capital Improvement Plan	Yes	No	No	Yes
<i>How often is the plan updated?</i> Annually				
<i>Comment:</i> Garden City has a Capital Improvement Plan that ensures infrastructure is being maintained and replaced to maintain optimal performance. The Garden City Capital Improvements List covers water and sewer infrastructure as well as parks and pathways. This plan is updated on an annual basis.				
Disaster Debris Management Plan	Yes	Yes	No	No
<i>Comment:</i> Work with EMCR				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity ?
Floodplain or Watershed Plan <i>Comment:</i> The Ada County All Hazards Mitigation Plan-update is the floodplain management plan of record for all communities within the planning area that participate in the CRS program.	Yes	Yes	No	Yes
Stormwater Plan <i>Comment:</i> Garden City complies with the requirements as per EPA requirements in NPDES	Yes	Yes	No	No
Urban Water Management Plan <i>Comment:</i>	No	Yes	No	No
Habitat Conservation Plan <i>Comment:</i> Under Title 36 of the Idaho State Statues Garden City defers to Idaho Fish and Game to ensure wildlife preservations and wetland preservation areas- BREN, Boise River Enhancement Network has adopted the Boise River Enhancement Plan.	No	Yes	Yes	Yes
Economic Development Plan <i>Comment:</i> Garden City has established a Comprehensive Plan, Capital Improvement, and is also incorporated in the Boise Valley Economic Plan	Yes	Yes	No	Yes
Shoreline Management Plan <i>Comment:</i>	No	No	No	NA
Community Wildfire Protection Plan <i>Comment:</i> The 2017 Ada County Multi-hazard Mitigation Plan is being developed to be a qualifying CWPP for the Ada County planning area	No	Yes	No	Yes
Forest Management Plan <i>Comment:</i>	No	No	No	NA
Climate Action Plan <i>Comment:</i>	No	No	No	NA
Comprehensive Emergency Management Plan <i>Comment:</i> Work with EMCR	Yes	No	No	Yes
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment:</i> Ada County Multi-Hazard Mitigation Plan, Ada County THIRA 2015	Yes	No	No	Yes
Post-Disaster Recovery Plan <i>Comment:</i>	No	No	No	Yes
Continuity of Operations Plan <i>Comment:</i> Work with EMCR	Yes	No	No	Yes
Public Health Plan <i>Comment:</i> Central District Health Department Emergency Operations Plan, 2013	No	Yes	No	No
Other <i>Comment:</i> Ada County Flood Response Plan. Adopted: January, 2006 Ada County Mass Casualty Incident Plan. Adopted: 12/16/2010 Ada County HAZMAT Response Plan. Adopted: April 2011 Ada County Wildfire Response Plan. Adopted: May 2010	Yes	No	No	Yes

Table 4-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i> Development Services	Yes
Does your jurisdiction have the ability to track permits by hazard area?	No
Does your jurisdiction have a buildable lands inventory?	No

Table 4-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify:</i> Monthly Water/sewer base rate	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	No
Development Impact Fees for Homebuyers or Developers	No

Table 4-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Development Services/Garden City/ Planning Staff/ City Engineer	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Public Works/Garden City/ Water, Sewer, and Engineering Staff	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Public Works and Development Services/Garden City/ Staff	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i>	No
Surveyors <i>If Yes, Department /Position:</i> Public Works/Garden City/Engineer	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i>	No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i>	No
Emergency manager <i>If Yes, Department /Position:</i> Ada County/Director of EMCR	Yes
Grant writers <i>If Yes, Department /Position:</i>	No

Table 4-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Mayor
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> gardencityidaho.org	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> EMCR website and floodplain page	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No

Criterion	Response
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Social Media, emergency broadcasting, geo Notify	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 4-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Development Services
Who is your floodplain administrator? (department/position)	Development Services Director
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	2020
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> Adopted higher regulatory standards and improving CRS classification	Exceed
When was the most recent Community Assistance Visit or Community Assistance Contact?	2018 visit/ annual contact via audit
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i>	No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i>	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i> Flooding will not adhere to a model. There will be debris, etc. Irrigation structures are not included in model.	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> Ongoing	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> Yes <i>If no, is your jurisdiction interested in joining the CRS program?</i>	Yes
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> \$148,653,700 <i>What is the premium in force?</i> \$357,118	485
How many total loss claims have been filed in your jurisdiction? ^a <i>What were the total payments for losses?</i> \$44,557	18

a. According to FEMA statistics as of March 31, 2022

Table 4-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	1600129620	N/A
DUNS #	Yes	169195369	N/A
Community Rating System	Yes	8	2013
Building Code Effectiveness Grading Schedule	No	10 (not participating)	N/A
Public Protection	Yes	3/8/9 (NACFR)	N/A
Storm Ready	Yes	Blue	N/A
Firewise	No	N/A	N/A

4.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

4.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Comprehensive Plan**—Goal 5: Focus on the River, Goal 7: Connect the City; Goal 8: Maintain a Safe City; Goal 9: Develop a Sustainable City; Goal 10: Plan for the Future Goal 11: Serve the City and the future Land Use Map integrate the goals and recommendation of the Multi-Hazard Mitigation Plan.
- **Comprehensive Plan**—Parks and Waterway Plan and Multi-Hazard Mitigation Plan.
- **Master Parks and Pathways Plan**—The Master Parks and Waterways Plan seeks to preserve floodplain as a high priority for park land acquisition. Utilizing parks for drainage is also addressed in the plan.

4.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Zoning Code**—The City is conducting a comprehensive update to its zoning code. Additional mitigation and abatement measures may be considered for incorporation into the code.
- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

4.6 RISK ASSESSMENT

4.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 4-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 4-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	January 20, 2020, and continuing	\$7,223,399 noted for State of Idaho. This caused medical illnesses, loss of life, economic impacts due to loss of work.
Weather- Heat	N/A	Summer 2021	18 days of over 100 degrees reaching to 107 on July 6, 2021.
Weather- Rain	N/A	August 1, 2021	Heavy thunderstorm rain
Weather- Heat	N/A	Summer 2020	11 days of over 100 degrees reaching to 105 on July 30, 2020.
Earthquake	N/A	March 31, 2020	6.5 magnitude near Stanley, Idaho Personal property damages.
Weather- Heat	N/A	Summer 2018	11 days of over 100 degrees reaching to 110 on August 10, 2018.
Weather- Heat		Summer 2017	8 days of over 100 degrees.
Flooding	DR-4342	March 29-June 15, 2017	\$3,341,756 noted for all areas affected. Garden City specifically had flooding resulting in some minor damages to the private property. There were scouring of greenbelt paths, removal of a bridge, and considerable resources to monitoring, emergency prevention (sandbagging, etc.)
Weather- Snow	N/A	December 2016- March 2017	Local emergency declarations. 39" of snow Regionally, millions in claims related to structural damages.
Weather- Thunderstorm	N/A	August 22, 2013	
Weather- Thunderstorm	N/A	August 6, 2012	
Flood	N/A	May 8, 2012	\$540,000 (including ACHD and Ada County)
Water Main Break at Remington Street	N/A	April 1, 2012	\$500,000
Weather- Wind	N/A	March 29, 2009	\$33,000
Weather- Hail	N/A	August 6, 2009	
Weather- Hail	N/A	May 20, 2008	
Weather- Thunderstorm	N/A	September 4, 2007	
Weather- Thunderstorm	N/A	June 29, 2006	
Weather- Hail	N/A	June 13, 2006	
Weather- Thunderstorm	N/A	May 19, 2004	
Weather- Thunderstorm	N/A	August 31, 2004	
Weather- Thunderstorm	N/A	August 21, 2004	
Weather- Hail	N/A	June 29, 2004	
Weather- Hail	N/A	May 18, 2004	
Weather- Thunderstorm	N/A	January 30, 2004	
Weather- Thunderstorm	N/A	May 30, 2003	

Type of Event	FEMA Disaster #	Date	Damage Assessment
Weather- Heat	N/A	Summer 2003	20 days of over 100 degrees
Weather- Thunderstorm	N/A	July 26, 2002	
Weather- Thunderstorm	N/A	July 22, 2002	
Weather- Thunderstorm	N/A	July 14, 2002	
Weather- Thunderstorm	N/A	February 7, 2002	
Weather- Hail	N/A	May 16, 2000	
	N/A	September 1998	\$38,000
Weather- Storm	N/A	April 1998	\$20,000
Flood	N/A	September 1997	\$57,000
Flood	N/A	March 7, 1997	\$50,000,000
Flood	N/A	January 1997	\$65,000,000
Weather-Lightning	N/A	July 1995	\$5,000
Weather-Storm	N/A	April 27, 1995	\$50,000
Weather-Snow	N/A	November 1992	\$9,800.00
Weather-Wind	N/A	October 1992	\$6,250.00
Flood	N/A	August 1992	\$4,545
Drought	N/A	1987-1992	\$500,000,000
Weather-Storm	N/A	January 1988	\$8,700
Weather-Wind	N/A	July 1987	\$10,000
Flooding	N/A	February 1986	\$20,000
Weather- Snow	N/A	Winter 1985-1986	39.5" of snow
Earthquake	N/A	October 1983	\$4,000,000
Flood	N/A	June 1983	\$147,000
Weather- Snow	N/A	Winter 1983-1984	37.4" of snow
Weather- Wind	N/A	June 1981	\$50,000
Weather-Wind	N/A	March 1981	\$36,000
Flood	N/A	January 1979	\$50,000
Weather- Rain Flooding	DR-186	December 31, 1964	
Flood	DR-120	February 14, 1963	
Flood	DR-116	June 26, 1961	
Flood	DR-76	May 27, 1957	
Flood	DR-55	April 21, 1956	
Weather- Snow	N/A	Winter 1948-1949	45.4" of snow
Weather- Snow	N/A	Winter 1929-1930	48.8" of snow
Weather- Snow	N/A	Winter 1916-1917	50" of snow

4.6.2 Hazard Risk Ranking

Table 4-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy. Mitigation actions target hazards with high and medium rankings.

Table 4-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	48	High
2	Extreme Weather	33	High
3	Dam/Canal Failure	18	Medium
4	Earthquake	16	Medium
5	Wildfire	12	Low
6	Drought	9	Low
7	Volcano	6	Low
8	Landslide	3	Low

4.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 1
- Number of FEMA-identified Severe-Repetitive-Loss Properties: N/A
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Flood—With an estimated 74% of Garden City located in the 100-year floodplain, flooding from the Lower Boise River is the city’s highest risk because of the probability of anticipated flooding. Many structures were constructed before being designated in the floodplain and are lower than the anticipated base flood elevation. Aging and compact water and sewer infrastructure could increase water or sewer failure or contamination during flooding. This hazard forms safety and health concerns during and after the flood. There may be a loss of water, sewer, electrical, or gas services. Garden City has vital evacuation routes through the city with a small police department. The police department will have to manage the city’s evacuation and much of the surrounding municipalities’ evacuation moving through Garden City. Being a small city with limited resources may result in a prolonged recovery period, especially for the vulnerable populations east of Glenwood Street.
- Flood—Settlers Canal is at a higher elevation than the city. If the canal is not adequately maintained, it could pose a flood threat. This threat is not identified in the FEMA Special Flood Hazard Area (SFHA).
- Flooding—The ITD system through Garden City, for the most part, does not have a drainage system. The ACHD drainage system is undersized. ACHD and ITD roadway drainage could cause flooding in Garden City if the drainage system is lacking, undersized, or not maintained. Since 2002 there have been 7 flash floods in Ada County, with an identified \$10,000 of damages. The impervious nature of urbanization

exacerbates this risk. It is anticipated that the one repetitive loss of property in Garden City is due to inadequate street drainage.

- **Air Quality, Wildfire**—While the direct risk of wildfires is low, the air quality associated with the wildfires in other areas of Idaho and nearby states creates an air quality concerns for Garden City. From 2017-2021 there have been 199 days of impacted air quality of moderate/yellow category (AQI 51+) or above due to wildfires.
- **Air Quality, Inversion**—The air quality associated with the inversion is a vulnerability for Garden City. The inversion is generally during the winter months when low cloud formations and fog create dense air and traps air pollutants on the valley floor. From 2017-2021 there have been 234 days of impacted air quality of moderate/yellow category (AQI 51+) or above due to the inversion.
- **Weather, Snow**—There is a correlation between the heavy snow years and the flood years; there is also a direct vulnerability associated with each snow event. There are increased accidents and increased strain on the utility systems used to heat. In heavy snow years, the region has inadequate snow removal capabilities that limit access to goods, services, employment, and medical or emergency services.
- **Weather, Heat**—7 of the top 10 hottest summers in the Boise-wide area have been in the last 20 years (up to and including 2021). High heat can affect the air quality, and ancillary conditions result in health concerns. The heat can reduce outdoor activities resulting in economic impacts on private industries. Over strain on the utilities, particularly electricity and water, during these heat events is a vulnerability. Over-taxation of the electrical system can cause failure. Over-taxation on water systems could result in adverse effects on potable water.
- **All Hazards**—Access to power is imperative in weather events for life safety and needed in all hazardous events. There is an increased need for electrical resiliency. Recent growth trends have resulted in more people utilizing the electrical system. Additionally, there may be an increased need in addition to the growing population. For example, with the cost of gasoline prices increasing and the availability of electric cars, it is anticipated that there may be a shift in energy sources for vehicles. From May 4, 2017, to April 29, 2022, in Garden City, there have been 1,386 electrical power outages resulting in 703,490.4 customer hours of outages (the number of customers affected by each outage X the hours of each outage). An estimated 43% of the outages were identified as events related to conflicts from infrastructure being above ground. The events include outages related to weather events such as lightning or that cause ice loading or wind/ vegetation damage, animals or other foreign objects like balloons or kites, vandalism, and vehicular collisions. Events that are not considered to be due to the system being above ground might include planned maintenance, operator error, underground facility damage, corrosion, contamination, mechanical fail, improper installation, hardware fail, or unknown causes. Downed power lines increase the risk of electrocution.
- **All Hazards**—The evacuation routes are limited due to infrastructure and geography. Many of the roadways, especially the eastern portion of the city where there is an area of persistent poverty, are not designed to facilitate movement except for those in automobiles. Not all residents have access to personal vehicles. Moreover, Chinden, the principal evacuation route, is inadequate for non-vehicular mobility purposes. Chinden does not accommodate bike lanes, has few and unsafe crossings, irregular sidewalks, and uncontrolled access points. Additionally, many residents or businesses utilize Boise in their addressing. This could be confusing during an emergency response.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

4.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 4-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 4-12. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action GC-1—Green Infrastructure Flood Mitigation—Garden City needs a plan that identify strategic locations for alternate flood mitigation efforts, with an emphasis on green infrastructure to reduce floodplain and anticipated Base Flood Elevations. An example of such an effort may be identifying a location for an engineered parkland that is utilized to provide additional floodplain capacity and groundwater recharge.</p> <p>Comment: <i>In Process. Garden City has entered into an agreement with USACE for a GI study</i></p>			✓	GC-7
<p>Action GC-2—Levees Analysis Levee Analysis—There are a number of unaccredited levees in Garden City. Garden City needs an inventory of levees to determine condition and viability of the levees in Garden City and their hydraulic significance. If any of the levees could be hydrologically significant; include a cost estimate and a cost benefit analysis of accrediting or provisionally accrediting each levee, and the sustainability of required maintenance.</p> <p>Comment: <i>In Process. Garden City has entered into an agreement with USACE for a GI study</i></p>			✓	GC8
<p>Action GC-3—Water and Sewer Pipe replacement</p> <p>Comment: <i>Public Works continues with sewer and water pipe replacements.</i></p>			✓	GC-9
<p>Action GC-4—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to: enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p>Comment: <i>Ongoing. The City adopted a FEMA approved flood hazard ordinance with higher regulatory standards and revised special flood hazard area maps (SFHA) June of 2020. The city continues to provide public assistance and information on its website, in the Garden City Library, and on requested basis through the Development Services Department. The city intends on continuing to adopt any necessary amendments to the flood hazard code, updated SFHA maps, and provide assistance.</i></p>			✓	GC-4
<p>Action GC-5—Continue to maintain/enhance the City's classification under the Community Rating System (CRS)</p> <p>Comment: <i>Ongoing. The city had a five-year cycle visit March of 2022. The materials provided at the cycle visit include additional activities the code adopted in 2020 includes enhanced higher regulatory standards. Following, the city requested a reduction in the classification during this visit. The results have not been received at this time. Regardless if there is a reduction in the classification the city will endeavor to maintain its classification under the CRS.</i></p>			✓	GC-10
<p>Action GC-6—Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.</p>			✓	GC-1
<p>Action GC-7—Integrate Multi-Hazard Mitigation Plan into the Garden City Comprehensive Plan.</p> <p>Comment: <i>Adopted by reference in the Comprehensive Plan on July 22, 2019. This will be updated to carry over.</i></p>	✓		✓	GC-2
<p>Action GC-8—Establish emergency preparedness inventory with inspection and replacement plan</p> <p>Comment: <i>Ongoing. Equipment is inventoried. The backup generators have monthly testing and inspection. Further replacement plans will be needed as the equipment ages.</i></p>			✓	GC-11

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action GC-9 —Maintain Capital Improvement Plan for capital facilities/infrastructure within the City. <i>Comment: Ongoing. The City maintains a CIP for capital infrastructure within the City. This plan is updated annually.</i>			✓	GC-12
Action GC-10 —Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern <i>Comment: Garden City has adopted higher regulatory standards through the flood hazard ordinance in June of 2020.</i>	✓			
Action GC-11 —Support County-wide initiatives <i>Comment: Ongoing.</i>			✓	GC-13
Action GC-12 —Continuing of Operations Plan <i>Comment: Ongoing.</i>			✓	GC-14
Action GC-13 —EOP Emergency Operations Plan <i>Comment: Adopted RES1013-16 on June 27, 2016. Annual Reviews are required.</i>			✓	GC-15
Action GC-14 —Recovery Plan <i>Comment: A recovery plan is likely largely based on the funding that is available after a disaster. Funding often is very specific. The city intends on maintaining a fund balance.</i>		✓		
Action GC-15 —Garden City Parks security camera installation <i>Comment: The parks security cameras have been installed. Additional cameras will be installed as funding allows. There are trees and vegetation that are removed along the banks of the Boise River. Additional cameras may be appropriate along the river.</i>			✓	GC-16
Action GC-16 —Streetlight replacement/conversion to alternative energy streetlights <i>Comment: Ongoing.</i>			✓	GC-17
Action GC-17 —Acquisition of vulnerable property for use as parks. <i>Comment: The city has been in contact with Ada County requesting that Lady Bird Park be relocated to be adjacent to the river so that it can be constructed to provide flood conveyance and potentially naturally functioning open space.</i>			✓	GC-7
Action GC-18 —Purchase of stand-by generator for City Hall and Operations Center			✓	GC-6
Action GC-19 —Obtain portable generators for use in Ada County during power outages and other emergency situations. <i>Comment: There is one portable generator for this use.</i>			✓	GC-6
Action GC-20 —Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment. <i>Comment: Ongoing. Garden City has developed partnerships with Boise River Enhancement Network (BREN) to identify native and appropriate plantings. This list is made available to the public. The City Code requires the use of native and appropriate plantings within 25' of the greenbelt.</i>			✓	GC-18

4.8 HAZARD MITIGATION ACTION PLAN

Table 4-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 4-14 identifies the priority for each action. Table 4-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 4-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action GC-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Flood						
Existing	1, 3, 8, 10	Planning	USACE, Public Works, EMCR	High	HMGP, BRIC, FMA	Ongoing
Action GC-2 —Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community as drafted or amended.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Landslide						
New & Existing	1, 2, 4, 5, 6, 8, 9, 10	Planning	All City Departments, Planning Partners	Low	Local	Ongoing
Action GC-3 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	All City Departments	All Planning Partners	Low	Local	Short-term Ongoing
Action GC-4 —Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:						
<ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. 						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 4, 5, 6, 8	Development Services	EMCR, FCD10, Environmental Division	Low	Local	Short-term Ongoing
Action GC-5 — Coordinate with community stakeholders in both the public and private sectors to identify and pursue adaptive capacity strategies that could improve community resilience in relation to severe or changing weather conditions.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Landslide						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	All Departments	Planning Partners, BSU, NOAA	Low	HMGP, Local	Short-term Ongoing
Action GC-6 —Purchase generators and backup power capabilities for critical facilities and infrastructure that lack adequate backup power including:						
<ul style="list-style-type: none"> • City Hall • Operations Center • Obtain portable generators • Obtain a fuel truck that can fuel the generators at the police department, public works, wells, lift stations, and city hall. 						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Landslide						
New & Existing	1, 9, 10	Public Works	EMCR, Public Works, Private, Ada County	Medium	HMGP, BRIC, Local	Short-term
Action GC-7 — Green Infrastructure Flood Mitigation—Garden City needs a plan that identify strategic locations for alternate flood mitigation efforts, with an emphasis on green infrastructure to reduce floodplain and anticipated Base Flood Elevations. An example of such an effort may be identifying a location for an engineered parkland that is utilized to provide additional floodplain capacity and groundwater recharge.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 2, 3, 4, 6, 9	Development Services	Public Works, USACE, IDWR	High	HMGP, BRIC, FMA, USACE	Long-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action GC-8 — Levees Analysis—There are a number of unaccredited levees in Garden City. Garden City needs an inventory of levees to determine condition and viability of the levees in Garden City and their hydraulic significance. If any of the levees could be hydrologically significant; include a cost estimate and a cost benefit analysis of accrediting or provisionally accrediting each levee, and the sustainability of required maintenance.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 2, 3, 4, 6, 9, 10	Development Services	USACE, FEMA	High	FMA, USACE	Long-term
Action GC-9 — Water and Sewer Pipe replacement						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Landslide						
New & Existing	1, 3, 4, 6, 9, 10	Public Works		High	HMGP, BRIC, FMA, Local, Urban Renewal	Long-term Ongoing
Action GC-10 — Continue to maintain/enhance the City's classification under the Community Rating System (CRS)						
<i>Hazards Mitigated:</i> Flood						
New & Existing	8, 9	Development Services	FEMA, FCD10, EMCR, ACHD	Low	Local	Ongoing
Action GC-11 — Maintain emergency preparedness inventory inspections and establish a replacement plan.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	1, 9, 10	Public Works	Police Department	Low	Local	Ongoing
Action GC-12 — Maintain Capital Improvement Plan for capital facilities/infrastructure within the city.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Landslide						
New & Existing	1, 3, 6, 7, 8, 9, 10	Treasurer's Office	Public Works, Police, Development Services	Low	Local	Ongoing
Action GC-13 — Support County-wide initiatives.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	All City Departments	Planning Partners	Low	Local	Ongoing
Action GC-14 — Continuing of Operations Plan						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
Existing	1, 9, 10	Mayor's Office	All departments, Planning Partners	Low	Local	Short-term Ongoing
Action GC-15 — Annually review the EOP Emergency Operations Plan.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
Existing	1, 7, 8, 9, 10	Police Department	Public Works, Mayor's Office, Treasure's Office, Development Services, Planning Partners	Low	Local, HMGP	Ongoing
Action GC-16 — Garden City parks and river security camera installation.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather						
New & Existing	1, 3, 10	Public Works	Police Department, Development Services, IDL, IDWR, USACE	Medium	Local	Short-term Ongoing
Action GC-17 — Streetlight replacement/conversion to alternative energy streetlights.						
<i>Hazards Mitigated:</i> Extreme Weather						
New & Existing	1, 3, 4, 7, 9	Public Works	Idaho Power, ACHD	High	HMGP, BRIC, Urban Renewal	Long-term Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action GC-18 —Coordinate with stakeholders, local experts to establish a plan and policies for wetland, habitat, and stream protection and restoration for conveyance, resiliency, and habitat.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Wildfire, Drought, Landslide						
New & Existing	1, 2, 4, 6, 9, 10	Development Services	ACHD, IDWR, BREN, USACE, US Fish and Wildlife, BSU	Medium	HMGP	Ongoing
Action GC-19 —Develop a roadway drainage plan that includes elevating the street above the 100-year floodplain for Chinden Boulevard, a major evacuation route for the city and valley.						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure, Extreme Weather						
New & Existing	1, 2, 3, 4, 5, 6, 7, 9, 10	ITD	Garden City, ACHD	High	BRIC, ITD	Long-term
Action GC-20 —Develop a system drainage plan for all of city to address undersized drainage for street network.						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure, Weather						
New & Existing	1, 2, 3, 4, 5, 6, 7, 9, 10	ACHD	ITD, ACHD	High	BRIC, ACHD	Long-term
Action GC-21 —Remedy the repetitive loss property.						
<i>Hazards Mitigated:</i> Flood						
Existing	3, 9	Development Services	ACHD	High	HMGP, BRIC, FMA	Long-term
Action GC-22 —Placement of free Wi-Fi in public locations such as parks to provide access to internet and emergency messaging.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	7, 8, 9	Library		Medium	BRIC	Short-term
Action GC-23 —Undergrounding of powerlines to make the electrical grid more resilient by minimizing damages from weather events. This assists also in the allowance of street trees which then reduces the urban stormwater runoff, can be cooling in extreme weather, and provide assistance for better air quality. The undergrounding of utilities should be strategically targeted to lines that include critical facilities, are directly adjacent to vehicular travel ways, or include a number of tall adjacent trees.						
<i>Hazards Mitigated:</i> Extreme Weather, Wildfire						
New & Existing	1, 3, 4, 9, 10	Development Services	Idaho Power, ACHD, ITD	High	HMGP, BRIC, FMA	Long-term
Action GC-24 — Improve open space preservation practices that target floodplain capacity and will ensure optimal points under the CRS 420 activity.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	9	Development Services	Public Works, River Club Golf Course	Low	Local	Short-term Ongoing
Action GC-25 —Obtain and maintain 90 days of chemicals for potable water in case of a well outage						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Landslide						
New & Existing	1, 3, 4, 9, 10	Public Works		Medium	BRIC	Short-term Ongoing
Action GC-26 —Implement IT technologies that facilitate the ability to work remotely.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	1, 7, 10	IT	All departments	Medium-High	HMGP, BRIC	Short-term Ongoing
Action GC-27 — Implement IT technologies that ensure access to the system in case of loss of electricity or a server.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	1, 7, 10	IT	All departments	Medium-High	HMGP, BRIC	Short-term Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action GC-28 — Work with stakeholders to establish a regional plan for public outreach and education that can be utilized for CRS credit for the 330 Program for Public Information PPI activity. The outreach must include information related to hazard risks and critical information dissemination. Improve open space preservation practices that target floodplain capacity and will ensure optimal points under the CRS 420 activity.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 4, 7, 8, 9	Development Services		Medium	Local	Short-term Ongoing
Action GC-29 — Work with the Post Office to encourage the use of a Garden City specific address within Garden City to better inform residents' knowledge of hazards and emergency response activities in their city.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure, Earthquake, Wildfire, Drought, Volcano, Landslide						
New & Existing	1, 6, 9	Development Services		Low	Local	Short-term Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 4-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	4	High	High	Yes	Yes	No	Low	High
2	8	Medium	Low	Yes	No	Yes	High	Low
3	10	Medium	Low	Yes	No	Yes	High	Low
4	5	Medium	Low	Yes	No	Yes	High	Low
5	7	Medium	Low	Yes	Yes	Yes	High	Medium
6	3	High	Medium	Yes	Yes	No	Medium	High
7	6	Medium	High	No	Yes	No	Low	Medium
8	7	High	High	Yes	Yes	No	Medium	High
9	6	High	High	Yes	Yes	No	Medium	High
10	10	Low	Low	Yes	No	Yes	High	Low
11	3	High	Low	Yes	No	Yes	High	Low
12	7	Low	Low	Yes	No	Yes	High	Low
13	10	Medium	Low	Yes	No	Yes	High	Low
14	3	High	Low	Yes	No	Yes	High	Low
15	5	High	Low	Yes	Yes	Yes	High	Low
16	3	Low	Medium	No	No	No	Medium	Low
17	5	Low	High	No	Yes	No	Low	Medium
18	6	Medium	Medium	Yes	Yes	No	Medium	Medium
19	9	High	High	Yes	Yes	No	Low	High
20	9	High	High	Yes	Yes	No	Low	High
21	2	High	High	Yes	Yes	No	Low	High
22	3	High	Medium	Yes	Yes	No	Medium	High
23	5	High	High	Yes	Yes	No	Low	High

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
24	1	Low	Low	Yes	No	Yes	High	Low
25	5	High	Medium	Yes	Yes	Maybe	High	Medium
26	3	High	Medium	Yes	Yes	Maybe	Medium	Medium
27	3	High	Medium	Yes	Yes	Maybe	Medium	Medium
28	5	Medium	Medium	Yes	No	Maybe	Medium	Low
29	3	Medium	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 4-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Flood	GC-2, 3, 4, 10, 12, 13, 18	GC-1, 4, 11, 13, 21	GC-2, 4, 10, 13, 18, 29	GC-7, 13, 18	GC-2, 6, 13, 14, 15, 25, 26, 27, 29	GC-7, 8, 9, 13, 19, 20, 23	GC-4, 5, 7, 13	GC-2, 3, 4, 10, 13, 14, 15, 16, 24, 28
Extreme Weather	GC-2, 3, 5, 12, 13	GC-1, 5, 11, 13	GC-2, 5, 3, 29	GC-5, 13	GC-2, 5, 6, 13, 14, 15, 25, 26, 27, 29	GC-5, 9, 13, 19, 20, 23	GC-5, 13, 17, 23	GC-2, 3, 13, 14, 15
Medium-Risk Hazards								
Dam/Canal Failure	GC-2, 3, 12, 13	GC-1, 11, 13	GC-2, 13, 29	GC-13	GC-2, 6, 13, 14, 15, 25, 26, 27, 29	GC-9, 13, 19, 20	GC-5, 13	GC-2, 3, 5, 13, 14, 15
Earthquake	GC-2, 3, 12, 13	GC-1, 11, 13	GC-2, 13, 29	GC-13	GC-2, 6, 13, 14, 15, 25, 26, 27, 29	GC-9, 13	GC-5, 13	GC-2, 3, 13, 14, 15
Low-Risk Hazards								
Wildfire	GC-2, 3, 12, 13	GC-1, 11, 13	GC-2, 13, 29	GC-13	GC-2, 6, 13, 14, 15, 25, 26, 27, 29	GC-9, 13, 23	GC-5, 13	GC-2, 3, 13, 14, 15
Drought	GC-2, 3, 12, 13	GC-1, 11, 13	GC-2, 13, 29	GC-13	GC-2, 6, 13, 14, 15, 25, 26, 27, 29	GC-9, 13	GC-5, 13, 17	GC-2, 3, 13, 14, 15
Volcano			GC-29					GC-3, 13, 14, 15
Landslide	GC-2, 3, 12, 13	GC-1, 11, 13	GC-2, 13, 29	GC-13	GC-2, 6, 13, 14, 15, 25, 26, 27, 29	GC-9, 13	GC-5, 13	GC-2, 3, 13, 14, 15

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

4.9 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **Garden City Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Garden City Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

E Floating Feather Rd

W Prairie Rd

CITY OF GARDEN CITY



0 0.6 1.2 Miles



N Cartwright Rd

N Seaman Gulch Rd

N Moore Access Rd

E Hill Rd

N Horseshoe Bend Rd

EAGLE

W Arnold Rd

W Utahna Rd

W Hill Rd

W Joplin Rd

N Garrett St

W Marigold St

N Glenwood St

W McMillan Rd

W Goddard Rd

N Alworth St

Ive Mile Rd

W Ustick Rd

W Pomona Rd

N Alamo Rd

Lucky Peak Dam Failure Inundation Area

Legend

Maximum Pool Inundation Area

Area inundated by dam failure occurring when pool elevation is at the top of the impounding structure.

Study Area

Ada County Boundary

City Boundary

County Boundary

Interstate

Major Roads

Rail

Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, IDWR

BOISE

W Middlefield Rd

N Maple Grove Rd

N Cole Rd



N Curtis Rd

W Morris Hill Rd

W Franklin Rd

W Kipling Rd

S Maple Grove Rd

S Cole Rd

S Curtis Rd



CITY OF GARDEN CITY



0 0.5 1 Miles



EAGLE

BOISE

Liquefaction Potential

Legend

- Very Low
- Low
- Moderate
- High
- Very High
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF GARDEN CITY



0 0.5 1 Miles







EAGLE

BOISE

NEHRP Soil Classes

Legend

-  C (Dense soil/soft rock)
-  D (Stiff soil)
-  E (Soft clay)
-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF GARDEN CITY



0 0.5 1 Miles



EAGLE

BOISE

100-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

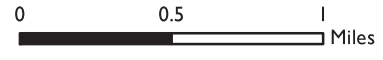
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF GARDEN CITY



EAGLE

BOISE

500-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF GARDEN CITY



0 0.5 1 Miles



Big Flat-Jake Creek M6.8 Earthquake Scenario

Legend

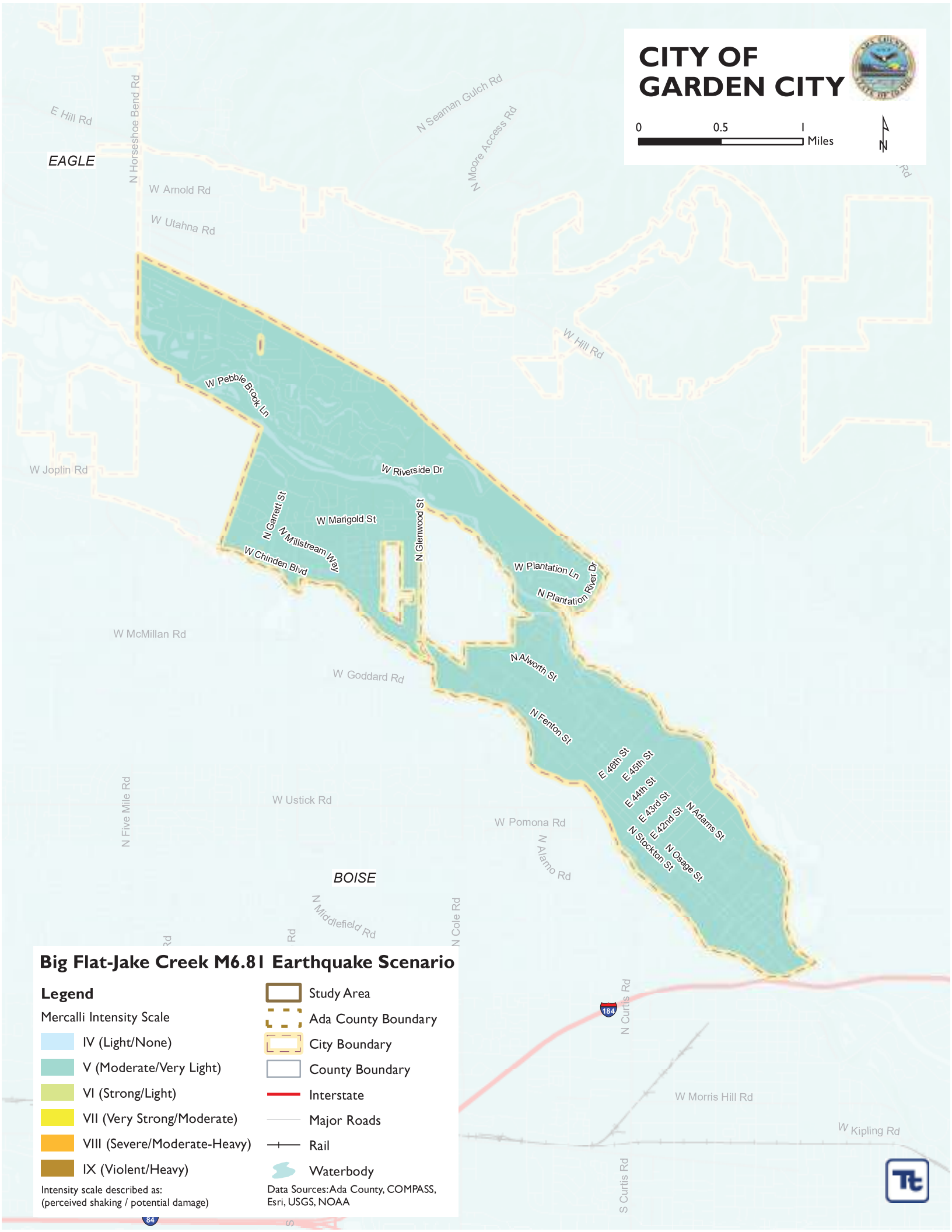
Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF GARDEN CITY



0 0.5 1 Miles



EAGLE

BOISE

Squaw Creek M7.03 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

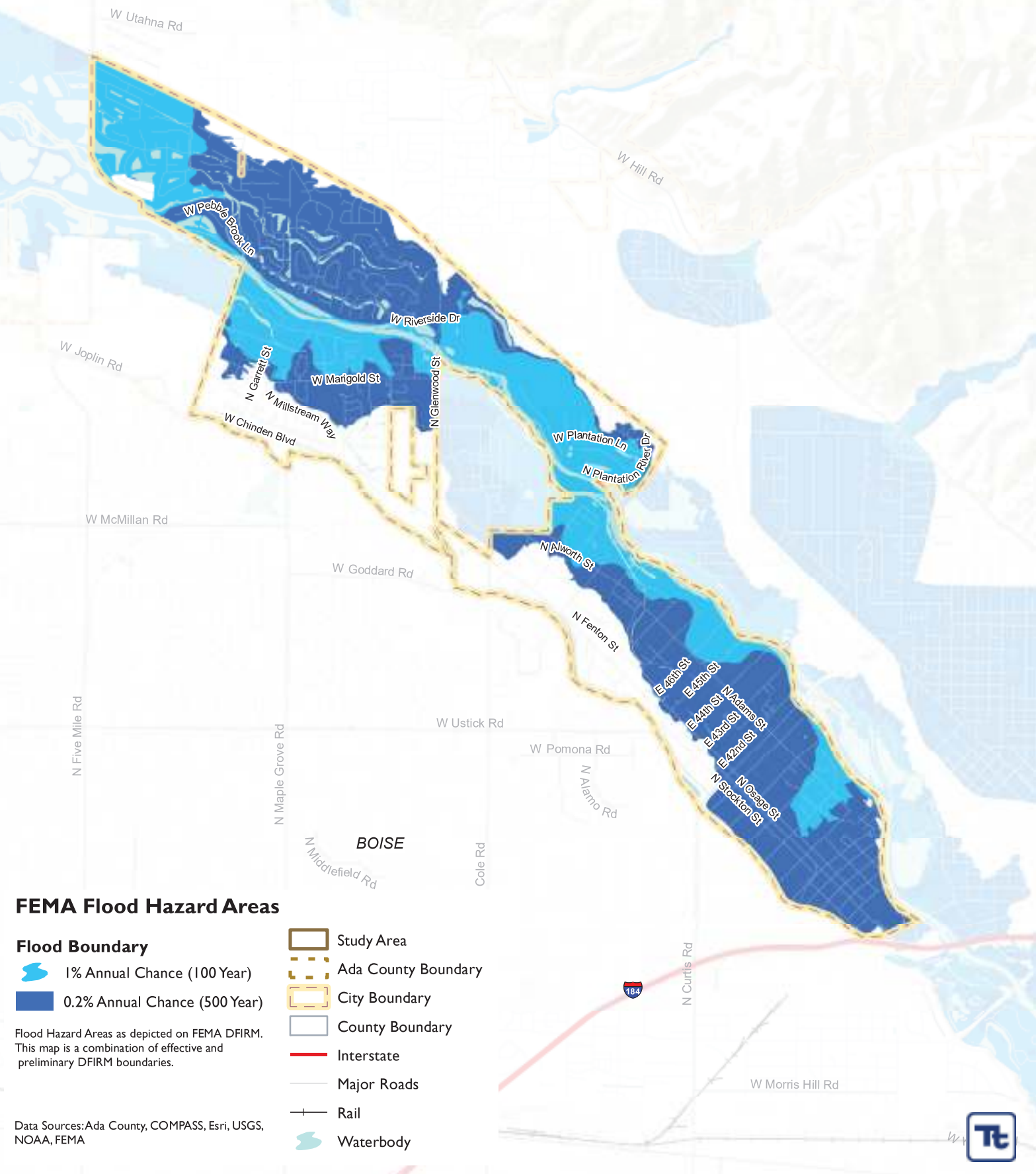
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF GARDEN CITY





EAGLE











FEMA Flood Hazard Areas

Flood Boundary

-  1% Annual Chance (100 Year)
-  0.2% Annual Chance (500 Year)

Flood Hazard Areas as depicted on FEMA DFIRM. This map is a combination of effective and preliminary DFIRM boundaries.

-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, FEMA



CITY OF GARDEN CITY



0 0.5 1 Miles











EAGLE




BOISE

Wildfire Hazard

Legend

-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Wildfire Base Hazard Rating

-  Low
-  Moderate
-  High

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



5. CITY OF KUNA

5.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Mike Borzick, GIS Manager
6950 S Ten Mile Rd
Meridian, ID 83642
Telephone: 208-287-1726
e-mail Address: MBorzick@KunaID.gov

Alternate Point of Contact

Brady Barrosa
6950 S Ten Mile Rd
Meridian, ID 83642
Telephone: 208-287-1722
e-mail Address: Bbarrosa@KunaID.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 5-1.

Table 5-1. Local Hazard Mitigation Planning Team Members

Name	Title
Mike Borzick	GIS Manager
Doug Hansen	Planning and Zoning Dir
Morgan Treasure	Economic Development Dir
Brady Barrosa	Staff Engineer
Troy Behunin	Planner

5.2 JURISDICTION PROFILE

5.2.1 Location and Features

The City of Kuna’s business district is located approximately 18 miles southwest of Boise and about 8 miles south of Meridian’s business districts and is part of the Boise City-Nampa, Idaho Metropolitan Statistical Area. Kuna is located about 8 miles south of U.S. Interstate 84 and intersects with State Highway 69.

The nearby Morley Nelson Snake River Birds of Prey National Conservation Area holds North America’s densest population of nesting raptors. The Western Heritage Historic Byway, designated as a national as well as a state scenic byway, travels around a number of historic sites in the area.

5.2.2 Climate

Kuna’s climate is semi-arid, with four distinct seasons. Kuna experiences hot and dry summers with highs exceeding 100 °F 5.6 days in a typical year and 90 °F on 46 days. Due to the aridity, summer nights often offer significant and crisp cool-downs. Winters are cold, with a January average of 30.2 °F, and lows falling to 0 °F or

below on around 4 nights per year. Snowfall averages 19 inches, but typically falls in bouts of 3 inches or less. Spring and fall are generally mild, with autumn being a quick transition period whereas spring is quite gradual. Precipitation is usually infrequent and light, and especially more lacking during the summer months.

5.2.3 History

The City of Kuna was incorporated on September 15, 1915. Kuna is located in the Ada County, which was established on December 22, 1864 by the Idaho Territorial Legislature. Kuna originated as a railroad stop with coach transport to Boise but after the branch line was complete, there was no need for a depot at Kuna and the settlement closed down. With the prospects of irrigation water, settlers were attracted to the area again. The principle industry was agricultural and in the early 1900s, over 700 acres were planted with vineyards, apples and prune orchards. Agricultural is still a major local industry today.

5.2.4 Governing Body Format

The City of Kuna is governed by a mayor-city council form of government; with four-elected City Council members and the Mayor. The City consists of seven departments: Finance; Economic Development; Parks; Public Works; Planning & Zoning, Police and City Clerk. The city government structure also includes a planning & zoning commission and design review committee. The City Council is responsible for the adoption of this plan, Planning and Zoning Department is responsible for its implementation.

5.3 CURRENT TRENDS

5.3.1 Population

According to COMPASS the population of the City of Kuna as of April 2022 was 27,480. Since 2017, the population has grown at an average annual rate of 7.9 percent.

5.3.2 Development

Based on data from Compass (Community Planning Association) and Kuna's Comprehensive Plan, Kuna remains one of the fastest growing cities in the Treasure Valley. Kuna's population increased from 15,210 in 2010 to 24,011 in 2020. This represents a 57.9 percent increase in population growth in 10 years. Kuna was a contender for CNN/Money's "Best Place to Live 2005" list. Kuna is transitioning from a rural community to a suburban city, and residential development has outpaced commercial development. Kuna has identified additional commercial areas as a component of the Comprehensive Land Use Plan. The next step is to implement the plan by establishing new zoning districts, rezoning property, and possibly forming an urban renewal district. City actions relating to land use, annexations, zoning, subdivision and design review, redevelopment and capital improvements must be consistent with the Comprehensive Plan. Future growth and development will be managed according to the Comprehensive Land Use Plan and it will be reviewed and amended as necessary.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 5-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 5-2. Recent and Expected Future Development Trends

Criterion	Response																														
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	Yes Approximately 61 parcels containing 2,810.91 acres have been annexed since 2016																														
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i>	Yes Areas within the Area of City Impact																														
<i>If yes, who currently has permitting authority over these areas?</i>	Planning and Zoning																														
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	Yes Facebook (Meta) has a large Server Farm that will be constructing East of town and is sure to bring more industrial to that area.																														
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	<table border="1"> <thead> <tr> <th></th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Single Family</td> <td>258</td> <td>365</td> <td>551</td> <td>706</td> <td>880</td> </tr> <tr> <td>Multi-Family</td> <td>11</td> <td>32</td> <td>8</td> <td>28</td> <td>1</td> </tr> <tr> <td>Other</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Total</td> <td>269</td> <td>397</td> <td>559</td> <td>734</td> <td>881</td> </tr> </tbody> </table>		2016	2017	2018	2019	2020	Single Family	258	365	551	706	880	Multi-Family	11	32	8	28	1	Other	N/A	N/A	N/A	N/A	N/A	Total	269	397	559	734	881
		2016	2017	2018	2019	2020																									
	Single Family	258	365	551	706	880																									
	Multi-Family	11	32	8	28	1																									
	Other	N/A	N/A	N/A	N/A	N/A																									
Total	269	397	559	734	881																										
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> ● Special Flood Hazard Areas: 14 ● Landslide: 0 ● High Liquefaction Areas: 0 ● Wildfire Risk Areas: 0 																														
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	The city doesn’t have an inventory of lands, but from the normal build cycles once a subdivision is constructed the builder generally pulls all the Building Permits for the entire subdivision. Only a couple of the projects have Custom builders that fill slowly.																														

5.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 5-3.
- Development and permitting capabilities are presented in Table 5-4.
- An assessment of fiscal capabilities is presented in Table 5-5.
- An assessment of administrative and technical capabilities is presented in Table 5-6.
- An assessment of education and outreach capabilities is presented in Table 5-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 5-8.
- Classifications under various community mitigation programs are presented in Table 5-9.

Table 5-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	No	No	No
<i>Comment: Comment: Title 4, Chapter 1 Kuna Municipal Code (KMC), adopts the 2012 IBC per state mandate. (12/2013)</i>				
Zoning Code	Yes	No	No	No
<i>Comment: Comment: Title 5, KMC, Adopted 1996</i>				
Subdivisions	Yes	No	No	No
<i>Comment: Comment: Title 65, KMC, Adopted 1977</i>				
Stormwater Management	No	Yes	Yes	Yes
<i>Comment: Comment: Ada County Highway Department (ACHD) – 11/11/2015</i>				
Post-Disaster Recovery	No	No	No	Yes
<i>Comment:</i>				
Real Estate Disclosure	No	No	No	No
<i>Comment:</i>				
Growth Management	Yes	No	No	No
<i>Comment: Comment: Kuna Comprehensive Plan, adopted 2009</i>				
Site Plan Review	Yes	No	No	No
<i>Comment: Comment: Title 5, Chapter 4, KMC adopted 8/21/2007</i>				
Environmental Protection	No	No	No	Yes
<i>Comment:</i>				
Flood Damage Prevention	Yes	No	No	Yes
<i>Comment: Comment: Flood Damage Prevention-Title 4, Chapter 5 KMC. Adopted 8/11/2003</i>				
Emergency Management	No	No	No	Yes
<i>Comment:</i>				
Climate Change	No	No	No	No
<i>Comment:</i>				
Planning Documents				
General Plan	Yes	No	Yes	Yes
<i>Is the plan equipped to provide linkage to this mitigation plan? Yes</i>				
<i>Comment: Policy was adopted under objective # 5.1 of Goal 5 or the Natural Resources and Hazardous Areas element of the 2015 Comprehensive Plan for the City of Kuna, adopted by City Council 8/2015</i>				
Capital Improvement Plan	Yes	No	No	No
<i>How often is the plan updated? Annually</i>				
<i>Comment: Enter Comment</i>				
Disaster Debris Management Plan	Yes	Yes	No	Yes
<i>Comment: Enter Comment</i>				
Floodplain or Watershed Plan	Yes	No	No	Yes
<i>Comment: Comment: The 2017 Ada County Multi-Hazard Mitigation Plan will qualify as a flood hazard management plan under CRS criteria upon its completion and adoption.</i>				
Stormwater Plan	Yes	No	Yes	Yes
<i>Comment: Comment: Kuna City complies with the requirements as per EPA requirements in NPDES, and IDWR requirements. ACHD holds NPDES Permit. City is responsible for Stormwater Pollution Prevention associated with City Projects.</i>				
Urban Water Management Plan	No	No	No	No
<i>Comment:</i>				
Habitat Conservation Plan	No	No	No	Yes
<i>Comment:</i>				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Economic Development Plan <i>Comment:</i>	Yes	No	No	Yes
Shoreline Management Plan <i>Comment:</i>	No	No	No	No
Community Wildfire Protection Plan <i>Comment: The 2017 Ada County Multi-hazard Mitigation plan is being developed as a CWPP for the Ada County planning area.</i>	Yes	No	No	Yes
Forest Management Plan <i>Comment:</i>	No	No	No	No
Climate Action Plan <i>Comment:</i>	No	No	No	No
Comprehensive Emergency Management Plan <i>Comment:</i>	No	No	No	Yes
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment: EMCR has developed and maintains a THIRA for the Ada County planning area.</i>	No	Yes	No	Yes
Post-Disaster Recovery Plan <i>Comment:</i>	No	No	No	Yes
Continuity of Operations Plan <i>Comment: City of Kuna Continuity of Operations (COOP), April 10, 2012</i>	Yes	No	No	Yes
Public Health Plan <i>Comment: Comment: Central District Health Department Emergency Operations Plan, 2013</i>	No	Yes	No	Yes

Table 5-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i>	No Development isn't "Permitted" – it does go through an approval process, but no "Permit" is issued.
Does your jurisdiction have the ability to track permits by hazard area?	No
Does your jurisdiction have a buildable lands inventory?	Yes

Table 5-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify: Sewer, Water, Irrigation (Pressure and Gravity)</i>	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 5-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Public Works/Director Public Works/City Engineer Public Works/Staff Engineers Public Works/GIS Manager, Plan Reviewer Planning/Director Planning/Staff	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Public Works/Director Public Works/City Engineer Public Works/Staff Engineers Public Works/GIS Manager, Plan Reviewer	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Public Works/Director Public Works/City Engineer Public Works/Staff Engineers Public Works/GIS Manager, Plan Reviewer	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Public Works/Director	Yes
Surveyors <i>If Yes, Department /Position:</i> Public Works/GIS Manager – Contract as needed	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Public Works/GIS Manager	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Contract as needed	Yes
Emergency manager <i>If Yes, Department /Position:</i> Ada County	Yes
Grant writers <i>If Yes, Department /Position:</i> City Clerk/Director - Contract as needed	Yes

Table 5-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes, Economic Developer
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website?	No
Do you use social media for hazard mitigation education and outreach?	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Approved COOP	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 5-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	GIS Department / Planning & Zoning
Who is your floodplain administrator? (department/position)	Public Works / GIS Manager
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	10/02/2003
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i>	Meet
When was the most recent Community Assistance Visit or Community Assistance Contact?	CAV 11/18/2002 CAC 9/12/1989
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i>	No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i>	Yes
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i>	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i>	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> <i>If no, is your jurisdiction interested in joining the CRS program?</i>	No
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> <i>What is the premium in force?</i>	1
How many total loss claims have been filed in your jurisdiction? ^a <i>What were the total payments for losses?</i>	0

a. According to FEMA statistics as of March 31, 2022

Table 5-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	1600144290	N/A
DUNS #	Yes	126045272	N/A
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	10/10	N/A
Public Protection	Yes	3/9	N/A
Storm Ready	Yes	Participant	N/A
Firewise	No	N/A	N/A
Tsunami Ready	No	N/A	N/A

5.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and

where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

5.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City of Kuna Continuity of Operations (COOP)**, April 10, 2012
- Policy was adopted under objective # 5.1 of Goal 5 or the Natural Resources and Hazardous Areas element of the 2015 Comprehensive Plan for the City of Kuna

5.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Future updates to the **City of Kuna's Comprehensive Plan**—the comprehensive plan will continue to use hazard mapping and hazard data in updates of the land use and safety sections.
- Continued **CWPP** integration with the Hazard Mitigation Plan wildfire maps and hazard data.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

5.6 RISK ASSESSMENT

5.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 5-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

5.6.2 Hazard Risk Ranking

Table 5-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 5-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	January 20, 2020, and continuing	N/A
Flooding	DR-4342	March 29 – June 15, 2017	Public Assistance Countywide: \$4,493,792
Thunderstorm Wind	N/A	10/19/2019	Several large trees, power lines and fences down, and car damage
Thunderstorm Wind	N/A	8/11/2015	Downed trees and power outages
Severe Wind	N/A	3/29/2009	\$33,000 (countywide)
Canal Breach	N/A	6/5/2006	Unknown (40 homes)
Severe Wind	N/A	4/27/1995	\$50,000 (countywide)
Flooding	N/A	6/1983	\$147,000 (countywide)

Table 5-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Flood	18	Medium
3	Earthquake	16	Medium
4	Wildfire	12	Low
5	Drought	9	Low
6	Volcano	6	Low
7	Dam/Canal Failure	0	Low
8	Landslide	0	Low

5.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Manmade Canal failures
- Wildfires around Transmission Power Lines

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

5.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 5-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 5-12. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action K-1— Provide redundancy with Conduit and Fiber hard-wired into all critical facilities.</p> <p><i>Comment:</i> Ongoing. Staff is continually budgeting, requesting development to design and build conduit in needed zones to close any holes or complete loops.</p>			✓	K-1
<p>Action K-2—Develop and maintain an inventory of City Critical Facilities</p> <p><i>Comment:</i> Ongoing. This action is complete as of this planning period, but needs to stay in the forefront and can never truly be completed.</p>			✓	K-7
<p>Action K-3—Open Space Preservation in identified high risk hazard area</p> <p><i>Comment:</i> This is being completed with our Comprehensive Plan, it is currently in the last stages of being approved at the City level and should be heading to the County sometime thereafter. In approval process 8/13/20</p>			✓	K-2
<p>Action K-4—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to: enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p><i>Comment:</i> Hiring of our new Staff Engineers. Staff is dedicated and supported by the Public Works Director to get more FEMA training and to ultimately become Floodplain Manager Certified.</p>			✓	K-4
<p>Action K-5—Continue to integrate Multi-Hazard Mitigation Plan into future updates of the Kuna Comprehensive Plan</p> <p><i>Comment:</i> Comprehensive Plan is currently under its last stages of review.</p>			✓	K-2
<p>Action K-6—Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.</p> <p><i>Comment:</i> No known properties that have sustained any damage more or less repeated damages</p>			✓	K-10
<p>Action K-7—Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.</p> <p><i>Comment:</i> In our Comprehensive Plan we have created buffer areas and riparian zone in and along Indian Creek, Mason Creek and several other large canals to push homes and structures back from those water ways for preservation of green space but also to hopefully mitigate any potential damages during a flood type event.</p>	✓			
<p>Action K-8—Support County-wide initiatives identified in Volume 1.</p> <p><i>Comment:</i> Continue this process as the city grows.</p>			✓	K-8
<p>Action K-9—Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.</p> <p><i>Comment:</i> We will gladly continue our support of this plan</p>			✓	K-3
<p>Action K-10—Update SCADA links to all critical facilities via Cell service. Many of our sites use radio repeaters to the water tower, if we lose the water tower we lose ALL communication</p> <p><i>Comment:</i> SCADA now runs on Cradle Points – however we need to continue this process as the City grows</p>			✓	K-9

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action K-11 —Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach.		✓		
<i>Comment: Better suited with the Kuna Rural Fire Department</i>				

5.8 HAZARD MITIGATION ACTION PLAN

Table 5-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 5-14 identifies the priority for each action. Table 5-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 5-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action K-1 —Where appropriate support development lead construction of conduit infrastructure to close any loops or holes in the City of Kuna’s Fiber Infrastructure. Where needed, budget for and construct needed infrastructure.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Dam/Canal Failure, Landslide						
Existing	1, 3, 8, 9, 10	City of Kuna	EMCR	High	HMGP, BRIC, FMA, ICC	Short-term
Action K-2 — Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including the Kuna Comprehensive Plan						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Dam/Canal Failure, Landslide						
New & Existing	3, 4, 5, 8, 9	City of Kuna	EMCR	Low	Staff Time, General Funds	Ongoing
Action K-3 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Drought, Volcano, Dam/Canal Failure, Landslide						
New & Existing	All	City of Kuna	EMCR	Low	Staff Time, General Funds, FEMA Mitigation Grant Funding for 5-year update	Short-term
Action K-4 —Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:						
<ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. 						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure						
New & Existing	2, 3, 4, 5, 6, 9	Planning & Zoning	N/A	Low	Staff Time, General Funds	Ongoing
Action K-5 —Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following:						
<ul style="list-style-type: none"> • Lack of Irrigation Water • Wildfire • Canal Failures 						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Drought, Wildfire						
New & Existing	2, 3, 4, 5, 6, 9	City of Kuna	EMCR	Low	Staff Time, General Funds	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action K-6 — Purchase generators for critical facilities and infrastructure that lack adequate backup power, including City Hall and the new Kuna East Operations Center						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Dam/Canal Failure, Landslide						
New & Existing	All	City of Kuna	EMCR	Low	General Funds, Development	Short Term
Action K-7 — Develop and maintain an inventory of City Critical Facilities						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Drought, Volcano, Dam/Canal Failure, Landslide						
Existing	All	Public Works	GIS Department	Medium	General Funds	Ongoing
Action K-8 — Support County-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Drought, Volcano, Dam/Canal Failure, Landslide						
New & Existing	All	City of Kuna	EMCR	Low	Unknown	Ongoing
Action K-9 — Continually update the SCADA process, look for redundancy with Fiber and Cell usage.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Drought, Volcano, Dam/Canal Failure, Landslide						
New & Existing	All	City of Kuna	EMCR	Medium	Budget Process	Short Term
Action K-10 — Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Earthquake, Wildfire, Volcano, Dam/Canal Failure, Landslide						
New & Existing	3, 8, 9	City of Kuna		High	HMGP, FMA, BRIC	Short Term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 5-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	2	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	No	Yes	High	Low
3	3	Low	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	7	Medium	Low	Yes	No	Yes	High	Low
6	3	High	Medium	Yes	Yes	No	Medium	High
7	3	High	Low	Yes	No	Yes	High	Low
8	7	Medium	Low	Yes	Yes	No	Medium	Medium
9	7	High	Medium	Yes	Yes	Yes	High	High
10	3	High	High	Yes	Yes	No	Medium	High

a. See the introduction to this volume for explanation of priorities.

Table 5-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather	2, 4, 5	1, 6, 10	8, 9	2, 4, 5	6, 9		5	3, 7, 8
Medium-Risk Hazards								
Flood	2, 5	1, 6, 10	8, 9	2, 4, 5	6, 9		5	3, 7, 8
Earthquake	2	1, 6, 10	8, 9	2	6, 9			3, 7, 8
Low-Risk Hazards								
Wildfire	2, 5	1, 6, 10	8, 9	2, 5	6, 9		5	3, 7, 8
Drought	5	1, 6	8, 9	2, 5	6, 9		5	3, 7, 8
Volcano					6, 9			3, 7, 8
Dam/Canal Failure	2, 4	1, 6, 10	8, 9	2, 4	6, 9			3, 7, 8
Landslide	2,	1			6, 9			3, 7, 8

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

5.9 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **Kuna Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

CITY OF KUNA



0 1 2 Miles



MERIDIAN

Liquefaction Potential

Legend

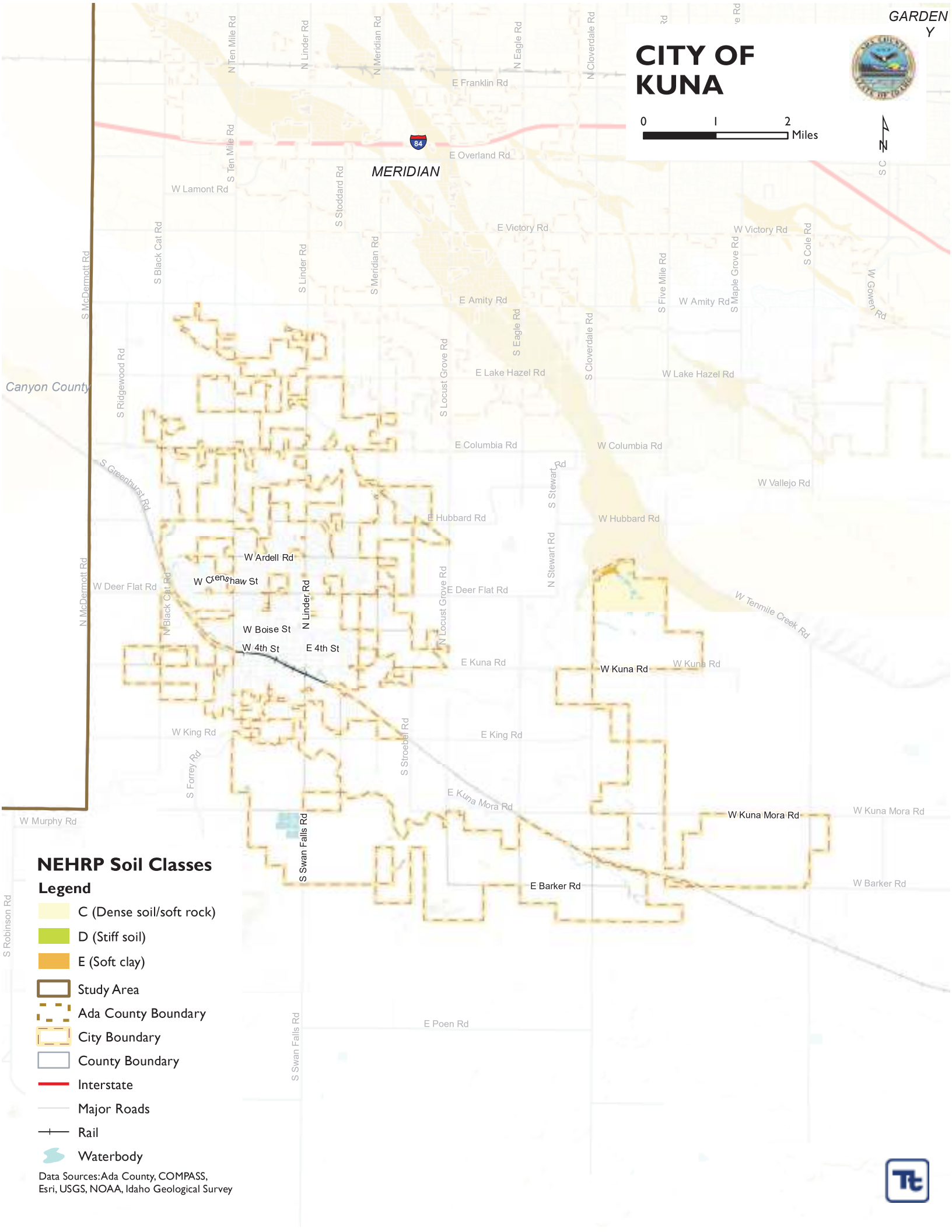
- Very Low
- Low
- Moderate
- High
- Very High
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey
















CITY OF KUNA



MERIDIAN

NEHRP Soil Classes

Legend

-  C (Dense soil/soft rock)
-  D (Stiff soil)
-  E (Soft clay)
-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

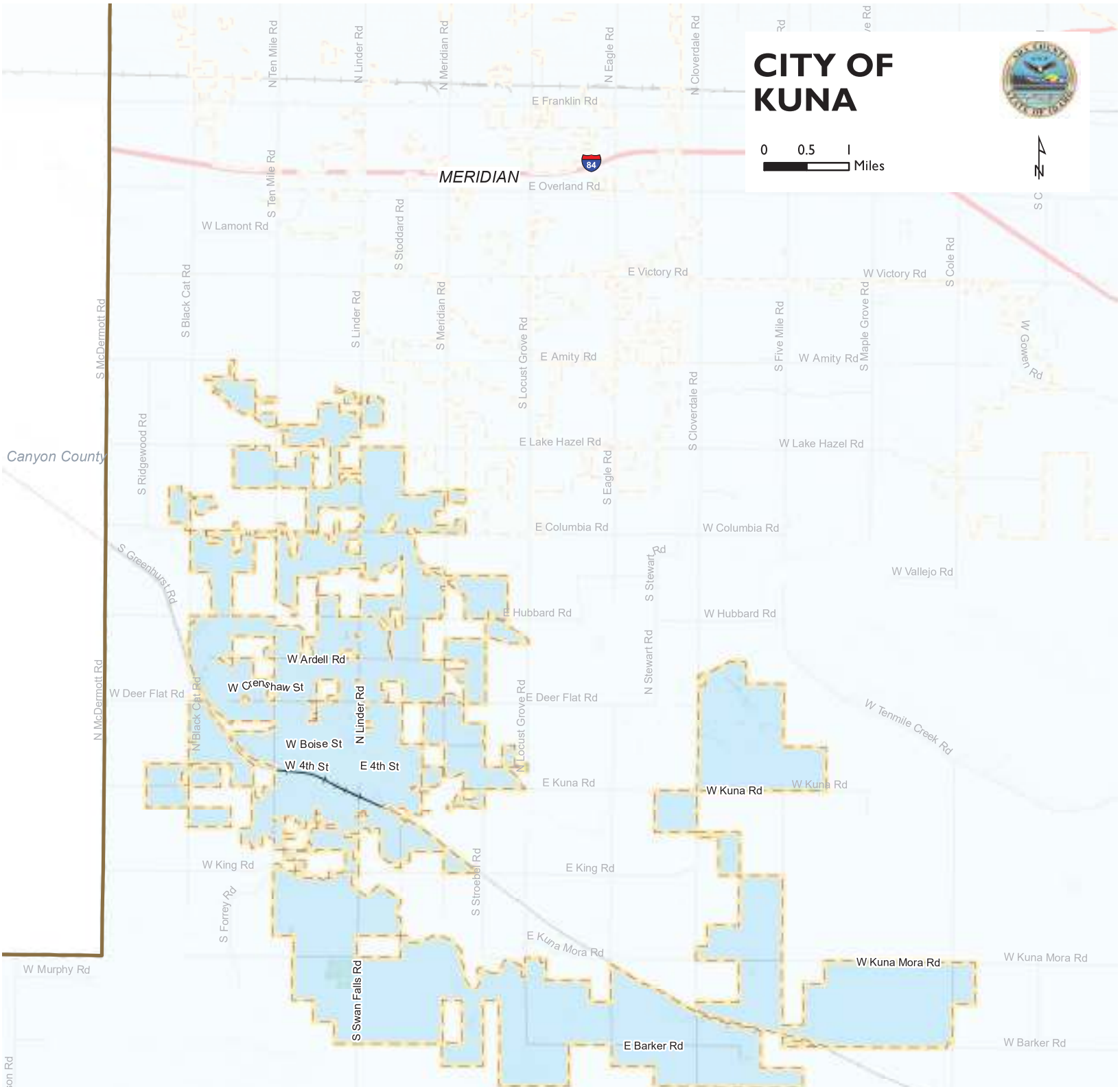
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF KUNA



0 0.5 1 Miles



100-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)


Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody


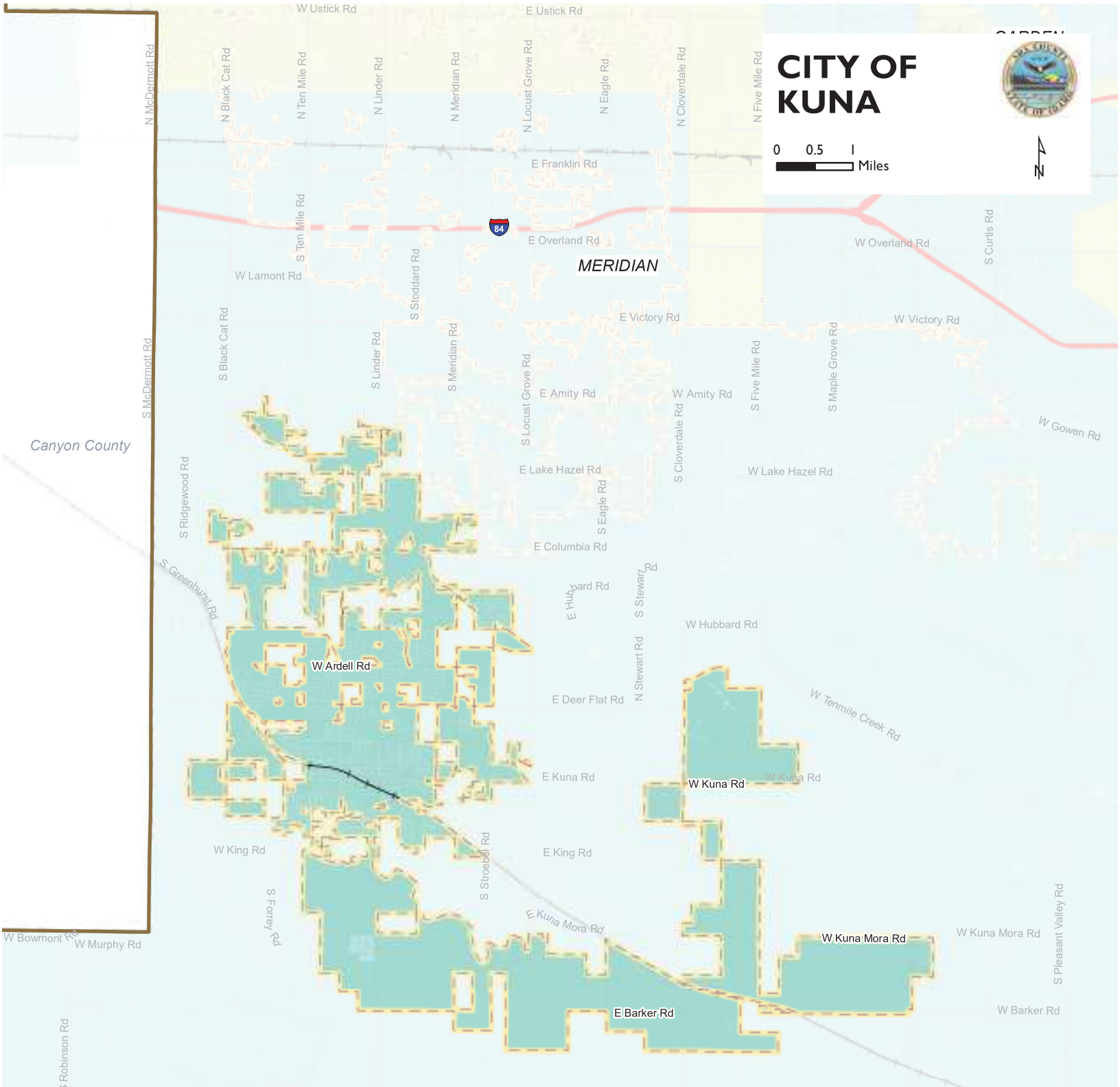
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF KUNA



0 0.5 1 Miles

500-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

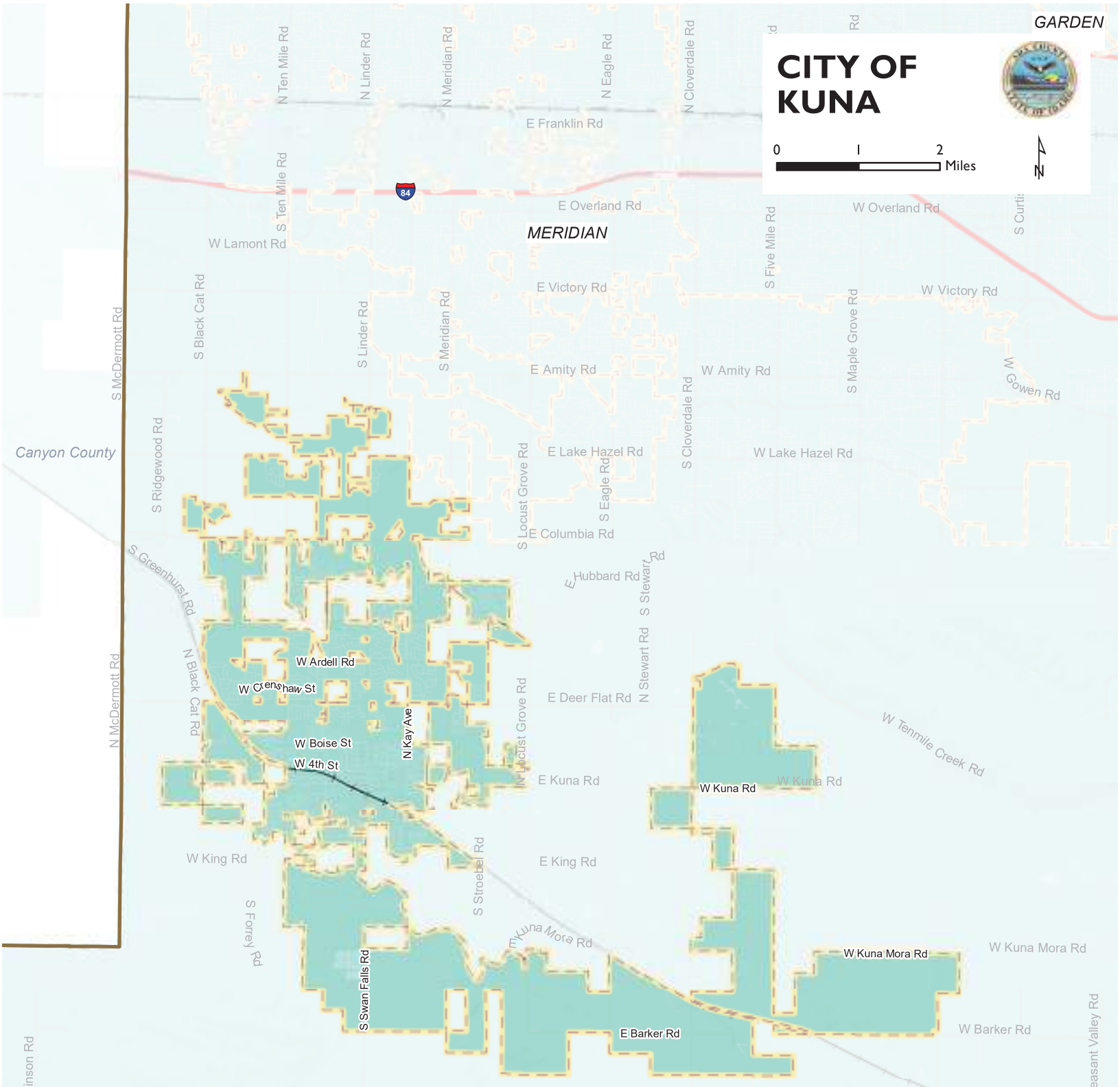
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF KUNA



Big Flat-Jake Creek M6.81 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

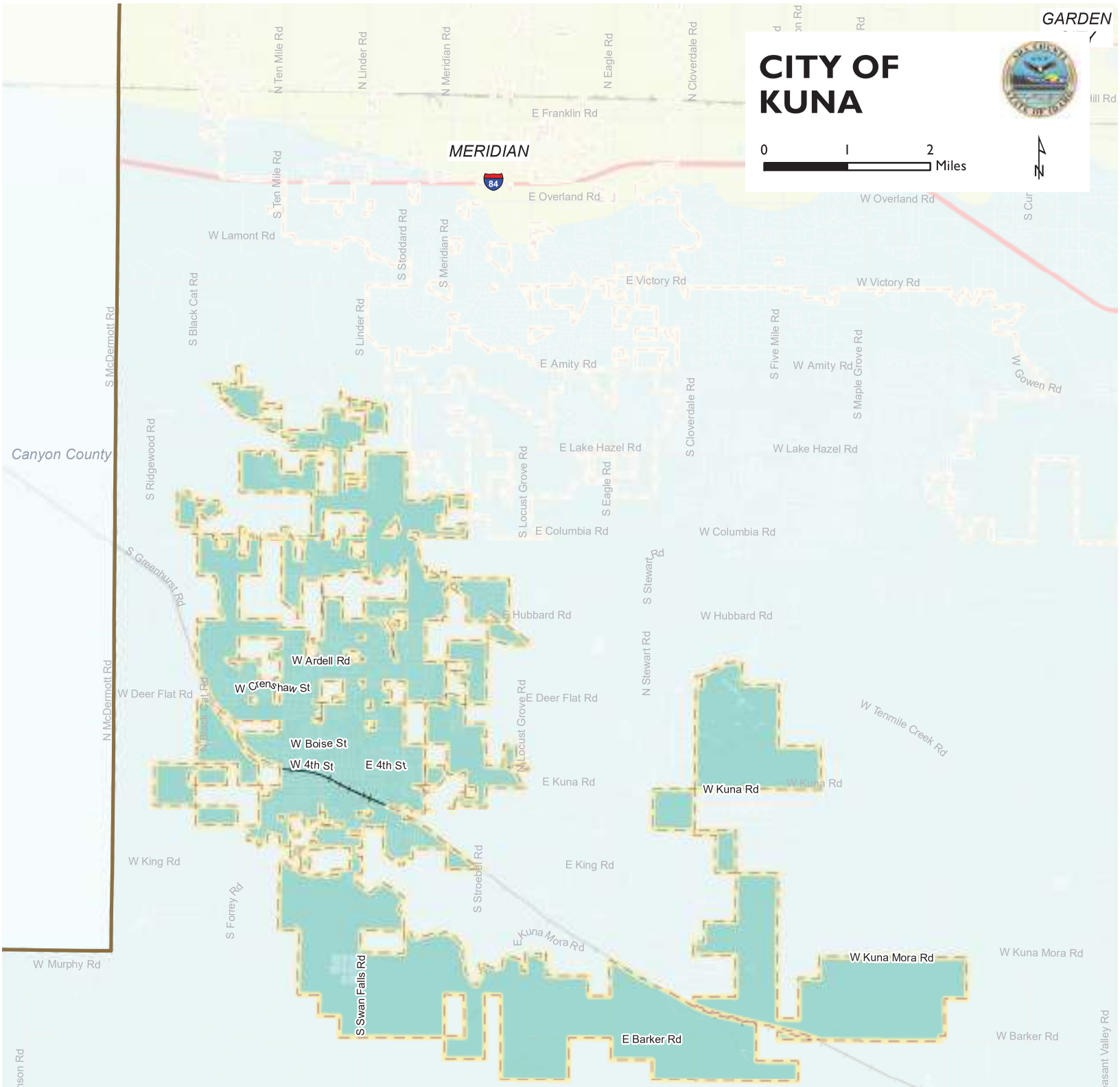
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF KUNA



Squaw Creek M7.03 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

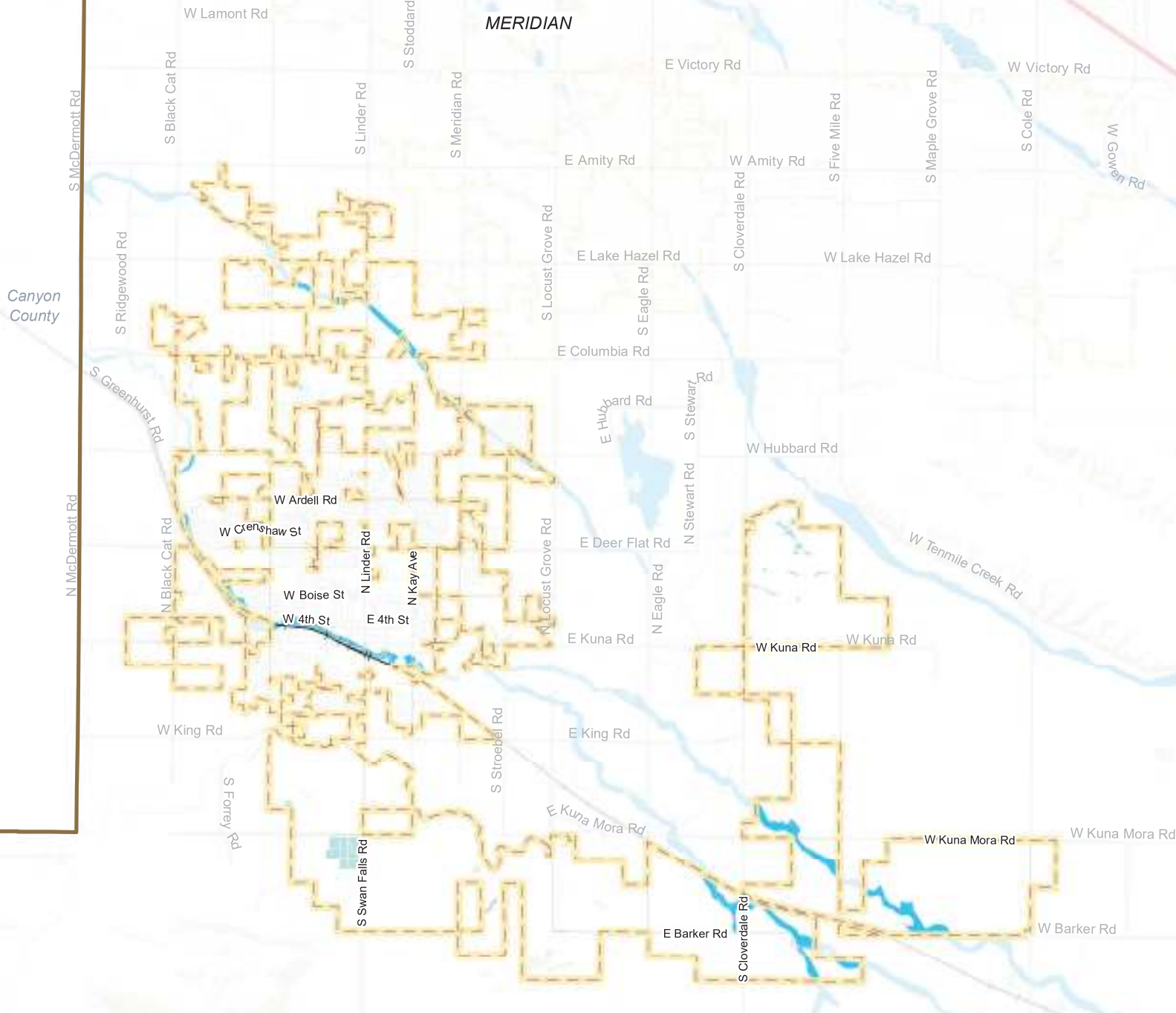
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA





CITY OF KUNA









FEMA Flood Hazard Areas

Flood Boundary

-  1% Annual Chance (100 Year)
-  0.2% Annual Chance (500 Year)

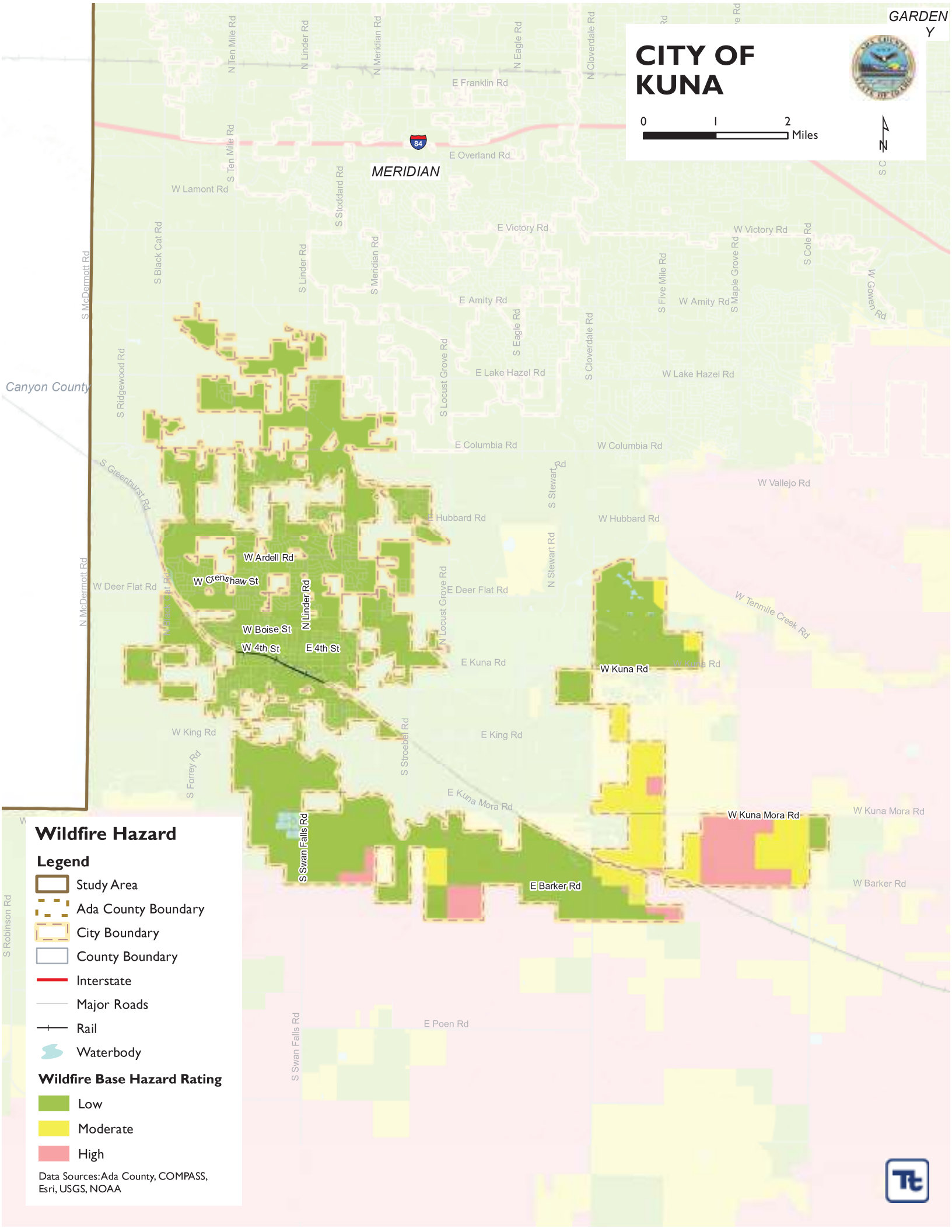
Flood Hazard Areas as depicted on FEMA DFIRM. This map is a combination of effective and preliminary DFIRM boundaries.

-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, FEMA



CITY OF KUNA



MERIDIAN

Wildfire Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Wildfire Base Hazard Rating

- Low
- Moderate
- High

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



6. CITY OF MERIDIAN

6.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Jason Korn, Environmental Programs Coordinator
33 E Broadway Ave
Meridian, ID 83642
Telephone: 208-489-0364
e-mail Address: jkorn@meridiancity.org

Alternate Point of Contact

Joanna Hopson, Business Programs Manager
33 E Broadway Ave
Meridian, ID 83702
Telephone: 208-898-5500
e-mail Address: jhopson@meridiancity.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 6-1.

Table 6-1. Local Hazard Mitigation Planning Team Members

Name	Title
Caleb Hood	Planning Division Manager
Joe Bongiorno	Deputy Chief
Jason Korn	Environmental Programs Coordinator
Joanna Hopson	Business Programs Coordinator

6.2 JURISDICTION PROFILE

6.2.1 Location and Features

Meridian is not only geographically located in the center of the Treasure Valley, but it also is the population center of the Treasure Valley; people are evenly distributed in all directions from Meridian. Downtown Meridian is approximately 10 miles from the heart of Boise.

Meridian is favored by a mild, arid climate. July is the hottest month, with the average high temperature of 90° F. January is the coldest month with an average low temperature of 22° F. The normal precipitation pattern in the Meridian area shows a winter high of 1.2 inches of precipitation per month and a very pronounced summer low of about 0.1 inches. Typically, there are 12 inches of annual precipitation.

6.2.2 History

The City of Meridian was incorporated in August 1903. Meridian has transformed from a sagebrush-filled mail drop located on the Oregon Trail in the 1880s, to a small fruit orchard center after the turn of the century through the 1930s, to a dairy-based farming community in the 1940s. Meridian is named for Idaho's principle meridian

used for the initial survey of the state which coincides with Meridian Road at the center of the City. Its character as a small farming community continued until approximately 1990, when its population was still about 10,000.

6.2.3 Governing Body Format

Meridian uses the Mayor-Council form of local government. In Meridian, the Council, which includes the Mayor, possesses both legislative and executive authority. Departments include: City Clerk, Community Development, Finance, Fire, Human Resources, Legal, Mayor’s Office, Parks & Recreation, Police, and Public Works.

The City Council is responsible for the adoption of this plan, City Departments are responsible for its implementation.

6.3 CURRENT TRENDS

6.3.1 Population

According to COMPASS, the population of the City of Meridian as of April 2022 was 133,470. Since 2017, the population has grown at an average annual rate of 7.2 percent.

6.3.2 Development

As of November 2021, single family housing is the predominant development in Meridian, accounting for 82% of all dwelling units. Additionally, at the end of 2021, Meridian provided 21% of available jobs in Ada County, or 53,035. Meridian seeks to offer a diversity of housing products, create strong and sustainable jobs, improve infrastructure, and support diversified modes of transportation.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 6-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 6-2. Recent and Expected Future Development Trends

Criterion	Response
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	Yes
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i>	Yes
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	Yes

Criterion	Response					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	2016	2017	2018	2019	2020	
	Single Family	1368	1428	1812	2109	1867
	Multi-Family	45	86	110	104	111
	Other	66	79	79	110	52
	Total	1569	1692	2171	2273	2076
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> • Special Flood Hazard Areas: 5 new structures since 2016. 1 Mobile Home and 4 Commercial buildings all elevated above BFE. Development on Ninemile, Eightmile and Fivemile Creek floodplains. • Landslide: 0 • High Liquefaction Areas: 0 • Wildfire Risk Areas: 0 					
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	Total area of Meridian area of annexed is 60.3% with 39.7% not annexed Land use breakdown of area currently annexed compared to area not yet annexed: Residential: 56% annexed / 44% not annexed Mixed Use: 17% annexed / 83% not annexed Employment: 71% annexed / 29% not annexed Civic: 84% annexed / 16 % not annexed					

6.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 6-3.
- Development and permitting capabilities are presented in Table 6-4.
- An assessment of fiscal capabilities is presented in Table 6-5.
- An assessment of administrative and technical capabilities is presented in Table 6-6.
- An assessment of education and outreach capabilities is presented in Table 6-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 6-8.
- Classifications under various community mitigation programs are presented in Table 6-9.

Table 6-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code <i>Comment: Meridian City Code Title 10, Chapter 1; Adopted 1/12 2020; Ord. #20-1905</i>	Yes	No	Yes	No
Zoning Code <i>Comment: Meridian City Code Title 11, Chapter 2; Adopted 7/8/2008; Ord. #08-1372</i>	Yes	No	No	No
Subdivisions <i>Comment: Meridian City Code Title 11, Chapter 6; Adopted 7/8/2008; Ord. #08-1372</i>	Yes	No	No	No
Stormwater Management <i>Comment: ACHD owns and operates storm drain system on public roadways. City of Meridian Design Standards Section 7, Grading and Drainage Standards.</i>	No	Yes	No	No
Post-Disaster Recovery <i>Comment:</i>	No	No	No	No
Real Estate Disclosure <i>Comment:</i>	No	No	No	No
Growth Management <i>Comment: City of Meridian Comprehensive Plan; Adopted 12/17/2019; Resolution #19-2179</i>	Yes	No	No	No
Site Plan Review <i>Comment: Multiple City Ordinances and Departments.</i>	Yes	No	No	No
Environmental Protection <i>Comment: Multiple City Ordinances and Departments.</i>	Yes	No	No	No
Flood Damage Prevention <i>Comment: Meridian City Code Title 10, Chapter 6; Adopted 5/12/2020; Ord. #20-1879</i>	Yes	No	No	No
Emergency Management <i>Comment: Emergency Management for the City of Meridian is done in partnership with ACCEM. Meridian participates through the EMCR Board as well as representation on TAG (Technical Advisory Group).</i>	Yes	Yes	No	Yes
Climate Change <i>Comment:</i>	No	No	No	No
Planning Documents				
General Plan <i>Is the plan equipped to provide linkage to this mitigation plan? No</i> <i>Comment: City of Meridian Comprehensive Plan; Adopted 12/17/2019; Resolution #19-2179</i>	Yes	No	No	Yes
Capital Improvement Plan <i>How often is the plan updated? Every year, 10-year time frame.</i> <i>Comment: Capital Improvement Plan has been integrated into Comprehensive Financial Plan for FY23-FY32</i>	Yes	No	No	No
Disaster Debris Management Plan <i>Comment: Draft Debris Management Annex awaiting adoption in EOP.</i>	No	Yes	No	Yes
Floodplain or Watershed Plan <i>Comment: The 2022 Ada County Multi-Hazard Mitigation Plan qualifies as a flood hazard management plan under CRS criteria upon its completion and adoption</i>	Yes	No	No	Yes
Stormwater Plan <i>Comment: ACHD owns and operates storm drain system on public roadways and maintains a Stormwater Management Plan. Private Property runoff managed by City of Meridian Design Standards Section 7, Grading and Drainage Standards.</i>	No	Yes	No	No
Urban Water Management Plan <i>Comment:</i>	No	No	No	No
Habitat Conservation Plan <i>Comment:</i>	No	No	No	No

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Economic Development Plan <i>Comment: Meridian has economic development staff and an Urban Renewal Agency, Meridian Development Corp. (MDC). MDC has development plans for various districts including those with flood hazard concerns.</i>	Yes	Yes	No	No
Shoreline Management Plan <i>Comment:</i>	No	No	No	No
Community Wildfire Protection Plan <i>Comment:</i>	No	No	No	No
Forest Management Plan <i>Comment:</i>	No	No	No	No
Climate Action Plan <i>Comment:</i>	Yes	No	No	No
Comprehensive Emergency Management Plan <i>Comment: The City has adopted a Comprehensive Emergency Operations Plan utilizing Emergency Support Functions.</i>	Yes	Yes	No	No
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment: Ada County THIRA – September 2018</i>	No	Yes	No	No
Post-Disaster Recovery Plan <i>Comment:</i>	No	No	No	No
Continuity of Operations Plan <i>Comment: Individual Departments have updated COOP plans 2021</i>	Yes	No	No	No
Public Health Plan <i>Comment: Central District Health Department Emergency Operations Plan, 2020. Fire Department does have input on Public Health planning via the ACCESS EMS system.</i>	No	Yes	No	No

Table 6-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i>	Yes Community Development, Building Services
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	No

Table 6-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify: Water and sewer utilities</i>	Yes
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 6-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Community Development, Public Works; several positions	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Community Development, Public Works; several positions	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Community Development, Public Works; several positions	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Community Development, Public Works; several positions	Yes
Surveyors	No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Information Technology, Community Development, Public Works, several positions	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Planning partners available through universities and Idaho Department of Homeland Security	No
Emergency manager <i>If Yes, Department /Position:</i> No dedicated Emergency Manager for the City of Meridian.	No
Grant writers <i>If Yes, Department /Position:</i> Ability to contract for service	Yes

Table 6-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes – Mayor’s Office Communications Manager
Do you have personnel skilled or trained in website development?	Yes – Information Technology
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Links to Ada County Mitigation websites	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Flood Safety Awareness Week posts	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Annual CRS mailings to property owners in floodplain, Social Media and in person outreach events such as Public Works Week.	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red – residents may sign up to receive emergency notifications and critical community alerts. Ada County EMCR developed a Joint Information System Plan that delineates the processes with developing a regional joint information system and center for coordinating public information messaging.	Yes

Table 6-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Community Development, Public Works
Who is your floodplain administrator? (department/position)	Public Works; City Engineer or Appointee
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	5/12/2020
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> Several (Low Floor 2' freeboard, Crawlspace 1' freeboard, added buffer of mapped boundaries, etc.)	Exceed
When was the most recent Community Assistance Visit or Community Assistance Contact?	11/6/2017
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	No
Are any RiskMAP projects currently underway in your jurisdiction?	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? Many Zone A hazard areas remain on Tenmile Creek and Fivemile Creek that require additional analysis. Many areas are mis-aligned and far from the actual waterway channel.	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? Need ongoing training for CFM certification and cross training backup floodplain management staff	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> No	Yes
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> \$32,569,900 <i>What is the premium in force?</i> \$87,637	120
How many total loss claims have been filed in your jurisdiction? ^a <i>What were the total payments for losses?</i> \$-	1

a. According to FEMA statistics as of March 31, 2022

Table 6-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	1600152120	N/A
DUNS #	Yes	028451367	N/A
Community Rating System	Yes	8	7/25/2016
Building Code Effectiveness Grading Schedule	Yes	5	10/19/2020
Public Protection	Yes	ISO Class 3	2020
Storm Ready	Yes	Blue	N/A
Firewise	No	N/A	N/A

6.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard

mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

6.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City of Meridian Comprehensive Plan**—The Comprehensive Plan for Meridian currently includes mitigation related policies as they related to the protection of human life and property from flood events. Additionally, the Comprehensive plan addresses the need for natural resource protection and the identification of known hazards within the County.
- **Meridian Flood Damage Prevention Ordinance**—Ordinance integrates with Ada County Multi-Hazard Mitigation Plan goals and objectives.
- **COOP** – The COOP plan for the City of Meridian was completed in 2012 and adopted by City Council.

6.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Comprehensive Plan Existing Conditions Report (ECR)**—Integrate mitigation plan risk assessment into hazardous areas section and reference mitigation actions in specific hazard sections.
- **Comprehensive Financial Plan (CFP)**—Mitigation may be funded, in part, through the City CFP plan and if grant funds are awarded for mitigation they need to be programmed into the CFP.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

6.6 RISK ASSESSMENT

6.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 6-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

6.6.2 Hazard Risk Ranking

Table 6-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 6-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Thunderstorm/Microburst	N/A	6/22/2021	Tree broken in half due to thunderstorm outflow winds. Estimated 60MPH wind gusts
Cloudburst Rain Event	N/A	Sept 2013	Unknown
Cloudburst Rain Events	N/A	Aug 2010	Unknown
Wildfires	N/A	Sept 2000	Unknown
Rain & Flooding	N/A	Dec 1964	Unknown

Table 6-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Flood	18	Medium
3	Earthquake	16	Medium
4	Drought	9	Low
5	Dam/Canal Failure	6	Low
6	Landslide	6	Low
7	Volcano	6	Low
8	Wildfire	0	Low

6.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Canal failure is a potential vulnerability. Refer to local irrigation districts for vulnerability assessments.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

6.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 6-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 6-12. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action M-1—Conduct a survey of water, sewer, fire, and police infrastructure including power generation equipment, wastewater treatment plant facilities, communications, and Supervisory Control and Data Acquisition (SCADA) equipment to analyze vulnerability to severe weather and earthquake, then design and execute improvements to mitigate.</p> <p>Comment: Wastewater treatment plant installed new switch for backup generator and has moved above ground power lines underground in 2021. Added new item to address backup power availability at other critical facilities.</p>	✓			
<p>Action M-2—Become a “Firewise Community”</p> <p>Comment: Becoming a Firewise community is still a goal of the Meridian Fire Department as the City expands into more wildfire prone areas.</p>			✓	M-8
<p>Action M-3—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to: enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p>Comment: City of Meridian maintains good standing under the NFIP and continues to enforce flood damage prevention ordinance through floodplain administration program.</p>			✓	M-4
<p>Action M-4—Maintain, and improve where beneficial, participation rating in the Community Rating System (CRS)</p> <p>Comment: City of Meridian currently maintains a CRS Rating of 8 and underwent Cycle Verification in 2020.</p>			✓	M-15
<p>Action M-5—Evaluate surface water protection program, including surface water restoration, stormwater management, capital improvement program integration, and potential regulatory and fee impacts.</p> <p>Comment: The Ada County Highway District operates the storm drain system and maintains a Stormwater Management Plan in the City of Meridian. Potential stream restoration and flood mitigation projects are listed as separate mitigation actions.</p>		✓		
<p>Action M-6—Partner with ACHD to implement a culvert replacement program for approximately 15 crossings of Fivemile, Ninemile, and Tenmile Creeks including design and construction.</p> <p>Comment: Culverts that have yet to be replaced are carried over to new plan.</p>			✓	M-14
<p>Action M-7—Partner with Idaho Transportation Department (ITD) to design and construct culvert improvements on Fivemile Creek at Eagle Rd and the I-84 / Eagle Road Interchange according to recommendations of “Fivemile Creek at Interstate 84—Eagle Road to Wells Street” Hydraulic Report, November 2008.</p> <p>Comment: ITD completed culvert improvements, LOMR effective November 2, 2018</p>	✓			
<p>Action M-8—Assist local irrigation districts with vulnerability assessments on the Ridenbaugh and New York Canal systems in the Meridian Area of Impact.</p> <p>Comment: Project is considered no longer feasible, remove from plan.</p>		✓		
<p>Action M-9—Perform an assessment to determine housing areas that would benefit from foundation elevation projects; and where appropriate, support and assist in grant funding opportunities for retrofitting, purchase or relocation projects.</p> <p>Comment: This action has been re-worded to include all high or medium risk hazard areas.</p>		✓		

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action M-10—Integrate Multi-Hazard Mitigation Plan into the City of Meridian's Comprehensive Plan.</p> <p><i>Comment:</i> The Meridian City Council adopted a new Comprehensive Plan by resolution 19-2179 on December 17th, 2019. Multi-Hazard Mitigation Plan is integrated and referenced in the new comp plan. Sections Livable/Public Safety address hazards and coordination.</p>	✓			
<p>Action M-11—Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.</p> <p><i>Comment:</i> To date, flood standards are consistent with community needs. Standards higher than the NFIP minimum remain in the new flood damage prevention ordinance effective 6/19/20. Other standards will be evaluated on on-going basis.</p>	✓			
<p>Action M-12—Support County-wide initiatives identified in Volume 1.</p> <p><i>Comment:</i> The city continues to support County-wide initiatives</p>			✓	M-19
<p>Action M-13—Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.</p> <p><i>Comment:</i> Meridian continues to support the Ada County Multi-Jurisdictional Hazard Mitigation Plan planning process. Annual progress reporting using BATool.</p>			✓	M-3
<p>Action M-14—Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach.</p> <p><i>Comment:</i> Fire safety and prevention education and outreach program is an ongoing effort of the Meridian Fire Department.</p>			✓	M-7
<p>Action M-15—Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.</p> <p><i>Comment:</i> Continue to evaluate projects as opportunity arises.</p>			✓	M-18

6.8 HAZARD MITIGATION ACTION PLAN

Table 6-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 6-14 identifies the priority for each action. Table 6-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 613. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action M-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.</p> <p><i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide</p>						
Existing	3, 8, 9	City of Meridian	N/A	High	HMGP, BRIC, FMA	Short-term
<p>Action M-2— Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including Flood Damage Prevention Ordinance, Community Risk Assessment and Comprehensive Plan.</p> <p><i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought</p>						
New & Existing	2, 5, 6	City of Meridian	Ada County	Low	Staff Time, General Funds	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action M-3 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought, Volcano						
New & Existing	All	City of Meridian	Ada County	Low	Staff Time, General Funds	Short-term
Action M-4 —Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:						
<ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. 						
<i>Hazards Mitigated:</i> Flood						
New & Existing	2, 3, 4, 6, 8, 9	City of Meridian	N/A	Low	Staff Time, General Funds, Enterprise Funds	Ongoing
Action M-5 — Coordinate with community stakeholders in both the public and private sectors to identify and pursue adaptive capacity strategies that could improve community resilience in relation to future climate conditions.						
<i>Hazards Mitigated:</i> Drought, Flood, Extreme Weather, Wildfire						
New & Existing	New & Existing	City of Meridian	N/A	Low	Staff Time, General Funds	Short-term
Action M-6 — Identify and install the most suitable backup power solution for critical facilities and infrastructure that lack adequate backup power. Solutions may vary based on circumstances and could include but are not limited to generators, switches, battery storage, and solar systems.						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Earthquake						
Existing	1, 3, 10	City of Meridian	N/A	Medium	General Funds, Enterprise Funds, BRIC, HMGP	Long-term
Action M-7 — Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach.						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	4, 5, 7, 8, 9	City of Meridian	N/A	Low	Staff Time	Ongoing
Action M-8 — Become a “Firewise Community”						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	4, 5, 7, 8, 9	City of Meridian	N/A	Low	Staff Time	Long-term
Action M-9 — Update the Black’s Creek Reservoir breach analysis and the resulting downstream flood inundation map using the most recent, highest resolution GIS data available. The model suggested for use should be HEC-RAS or an equivalent two-dimensional model that can satisfactorily recognize and address the hydrologic interactions with all natural and constructed geographic features that are located downstream of the facility. The breach analysis will model the reservoir at a full pool condition and will include two (2) scenarios consisting of (1) a non-flood failure (aka “sunny day”), and (2) a flood event failure during the 1% inflow design flood (aka 100-year flood).						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure						
New & Existing	2, 6, 7, 8, 9	City of Meridian	N/A	Medium	BRIC, FMA, HMGP	Short-term
Action M-10 — Ensure adequate water supply in drought conditions through purchasing space in new surface water storage projects.						
<i>Hazards Mitigated:</i> Drought, Dam/Canal Failure						
New & Existing	1, 9, 10	City of Meridian	IDWR	High	Enterprise Funds, Federal Grants	Long-term
Action M-11 — Increase community capability for drought resilience by developing a water conservation plan						
<i>Hazards Mitigated:</i> Drought						
New & Existing	1, 2, 5, 6, 8	City of Meridian	N/A	Low	Staff Time, Grants	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action M-12 — Increase community capability for mitigating landslide risk by developing hillside grading/drainage policies that provide adequate protections in steep topography.						
<i>Hazards Mitigated:</i> Landslide, Flood						
New	2, 4, 5	City of Meridian	N/A	Low	Staff Time	Long-term
Action M-13 — Construct Ninemile Creek Flood Mitigation Project as designed to eliminate flood risk to people, property and critical lifelines. The proposed improvements include constructing storm drain infrastructure and pipeline from Story Park to the outlet into the existing Ninemile Creek Channel north of the Union Pacific Railroad tracks. (Coordinates with the Meridian Development Corporations Action MDC-4.)						
<i>Hazards Mitigated:</i> Flood						
Existing	1, 3, 9, 10	City of Meridian	MDC	\$4.5 Million	HMGP, BRIC, MDC, FMA	Short-term
Action M-14 — Partner with ACHD to facilitate the replacement of roadway culverts to include design and construction of crossings on Fivemile, Ninemile, Eightmile and Tenmile Creeks. (Coordinates with Ada County Highway District Action ACHD-5)						
<i>Hazards Mitigated:</i> Flood, Extreme Weather						
Existing	1, 3, 9, 10	ACHD	City of Meridian	High	ACHD, General Funds, BRIC, FMA, HMGP	Long-term
Action M-15 — Continue to maintain/enhance the City’s classification under the Community Rating System.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	3, 4, 5, 6, 8	City of Meridian	N/A	Low	Staff Time, General Funds, Enterprise Funds	Ongoing
Action M-16 — Correct alignment issues on the National Flood Hazard Layer to correctly align with creek channels on Fivemile and Tenmile Creeks to more accurately reflect flood risk.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	2, 9	City of Meridian	FEMA	Low	General Funds, Enterprise Funds, Federal Grants	Long-Term
Action M-17 — Conduct detailed hydraulic analysis on remaining FEMA Flood Zone A areas on Fivemile and Tenmile Creeks. Update maps through LOMR to accurately reflect flood risk.						
<i>Hazards Mitigated:</i> Flood						
New & Existing	2, 9	City of Meridian	FEMA	Low	General Funds, Enterprise Funds, Federal Grants	Long-Term
Action M-18 — Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment						
<i>Hazards Mitigated:</i> Flood						
New & Existing	2, 5, 9	City of Meridian	N/A	Medium	General Funds, BRIC, FMA, HMGP	Long-Term
Action M-19 — Support County-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	All	City of Meridian	EMCR	Low	Staff Time, General Funds	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 6-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	No	Yes	High	Low
3	3	Low	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	7	Medium	Low	Yes	No	Yes	High	Medium
6	3	High	Medium	Yes	Yes	No	Medium	High
7	5	Low	Low	Yes	No	Yes	Medium	Low
8	5	Low	Low	Yes	No	Yes	Medium	Low
9	5	Medium	Medium	Yes	Yes	No	Medium	High
10	3	High	High	Yes	Yes	No	Medium	Medium
11	5	Medium	Low	Yes	Yes	Yes	Medium	Low
12	3	Medium	Low	Yes	No	Yes	Medium	Low
13	4	High	High	Yes	Yes	No	High	High
14	4	High	High	Yes	Yes	No	Medium	Medium
15	5	Medium	Low	Yes	No	Yes	High	Low
16	2	Medium	Low	Yes	Yes	No	Medium	Medium
17	2	High	Medium	Yes	Yes	No	Medium	Medium
18	3	High	Medium	Yes	Yes	No	Medium	Medium
19	10	Low	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 6-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather	M-2	M-1	M-5		M-6	M-14	M-5	M-3, 5, 19
Medium-Risk Hazards								
Flood	M-2, 4, 12, 15, 16, 17	M-1	M-4, 5, 9	M-18	M-6	M-13, 14	M-5, 18	M-3, 4, 5, 9, 12, 15, 16, 17, 18, 19
Earthquake	M-2	M-1			M-6			M-3, 19
Low-Risk Hazards								
Drought	M-2, 11		M-5	M-10		M-10	M-5	M-3, 5, 10, 11, 19
Dam/Canal Failure	M-2	M-1	M-9	M-10		M-10		M-3, 9, 10, 19
Landslide	M-2, 12	M-1						M-3, 12, 19
Volcano								M-3, 19
Wildfire	M-2	M-1	M-5, 7, 8				M-5	M-3, 5, 8, 19

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

6.9 PUBLIC OUTREACH

Table 6-16 lists public outreach activities for this jurisdiction.

Table 6-16. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Social Media share of Ada County survey posts	12/8/2021	unknown
Meridian Public Works Week – Floodplain Booth HMP information	6/8/2022	unknown

6.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

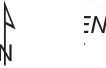
- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **City of Meridian Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of Meridian Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.



CITY OF MERIDIAN



STAR

W Moon Valley Rd

W Duck Alley Rd

S Artesian Rd
S Trout Rd

W Joplin Rd

N Star Rd

W McMillan Rd

N Linder Rd

N Meridian Rd

N Eagle Rd

W McMillan Rd

W Ustick Rd

W Ustick Rd

N Cloverdale Rd

BOISE

N Five Mile Rd

N Hampton Rd

N Black Cat Rd

N Ten Mile Rd

NW 8th St

NW 4th St

NE 5th St

N Locust Grove Rd

N Eagle Rd

N McDermott Rd

W Franklin Rd

N Main St

NE 3rd St

E Franklin Rd

W Franklin Rd

E Watertower St

S Ten Mile Rd

E Overland Rd

W Overland Rd

W Lamont Rd

W Victory Rd

W Victory Rd

W Victory Rd

W Amity Rd

E Amity Rd

S Five Mile Rd

KUNA

S Ten Mile Rd

S Linder Rd

S Meridian Rd

S Locust Grove Rd

S Cloverdale Rd

W Columbia Rd

E Columbia Rd

W Hubbard Rd

S Locust Grove Rd

W Hubbard Rd

S Stewart Rd

N Ten Mile Rd

W Ardell Rd

N Linder Rd

E Ardell Rd

N Meridian Rd

N Locust Grove Rd

N Stewart Rd

Blacks Creek Dam Failure Inundation Area

Legend

Maximum Pool Inundation Area

Area inundated by dam failure occurring when pool elevation is at the top of the impounding structure.

Study Area

Ada County Boundary

City Boundary

County Boundary

Interstate

Major Roads

Rail

Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, IDWR



CITY OF MERIDIAN

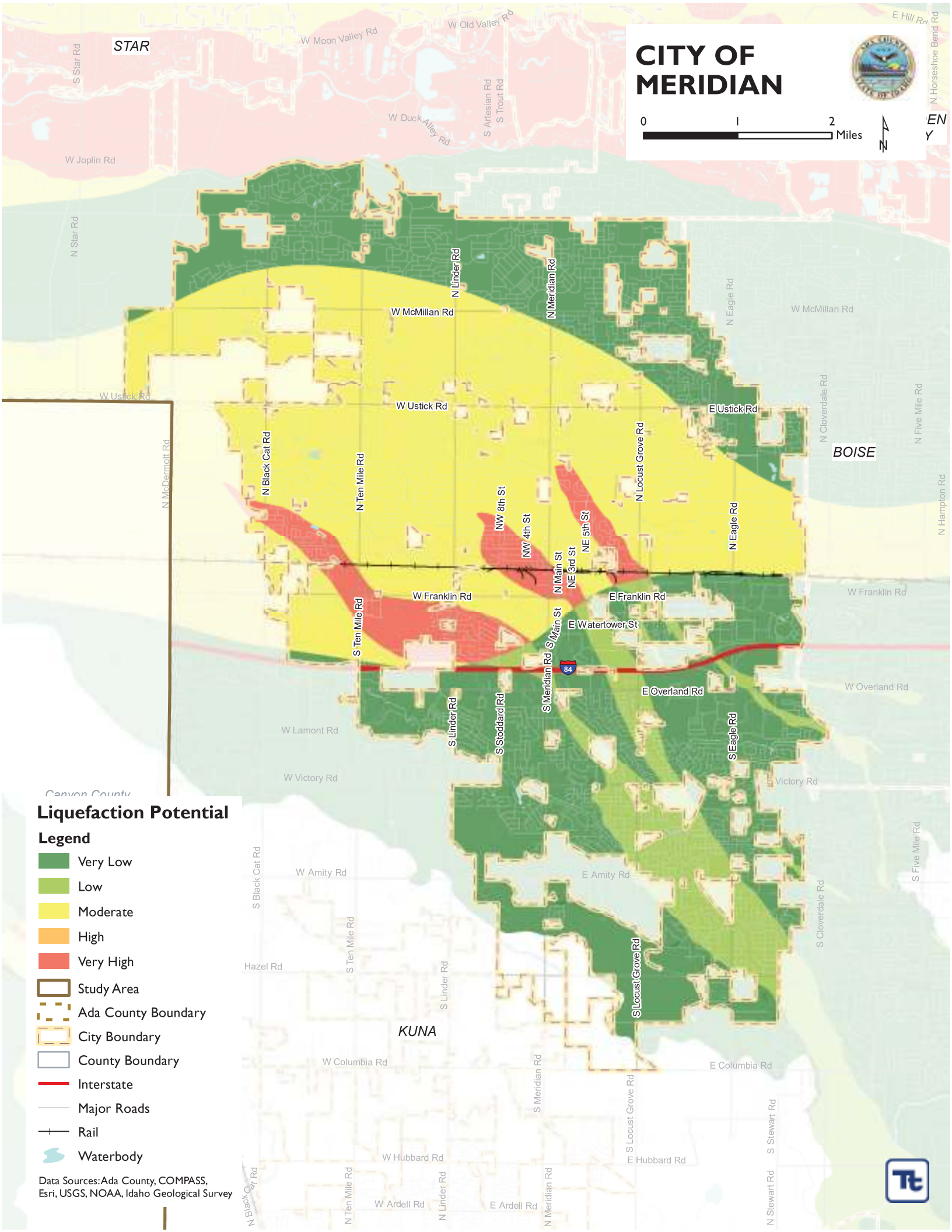


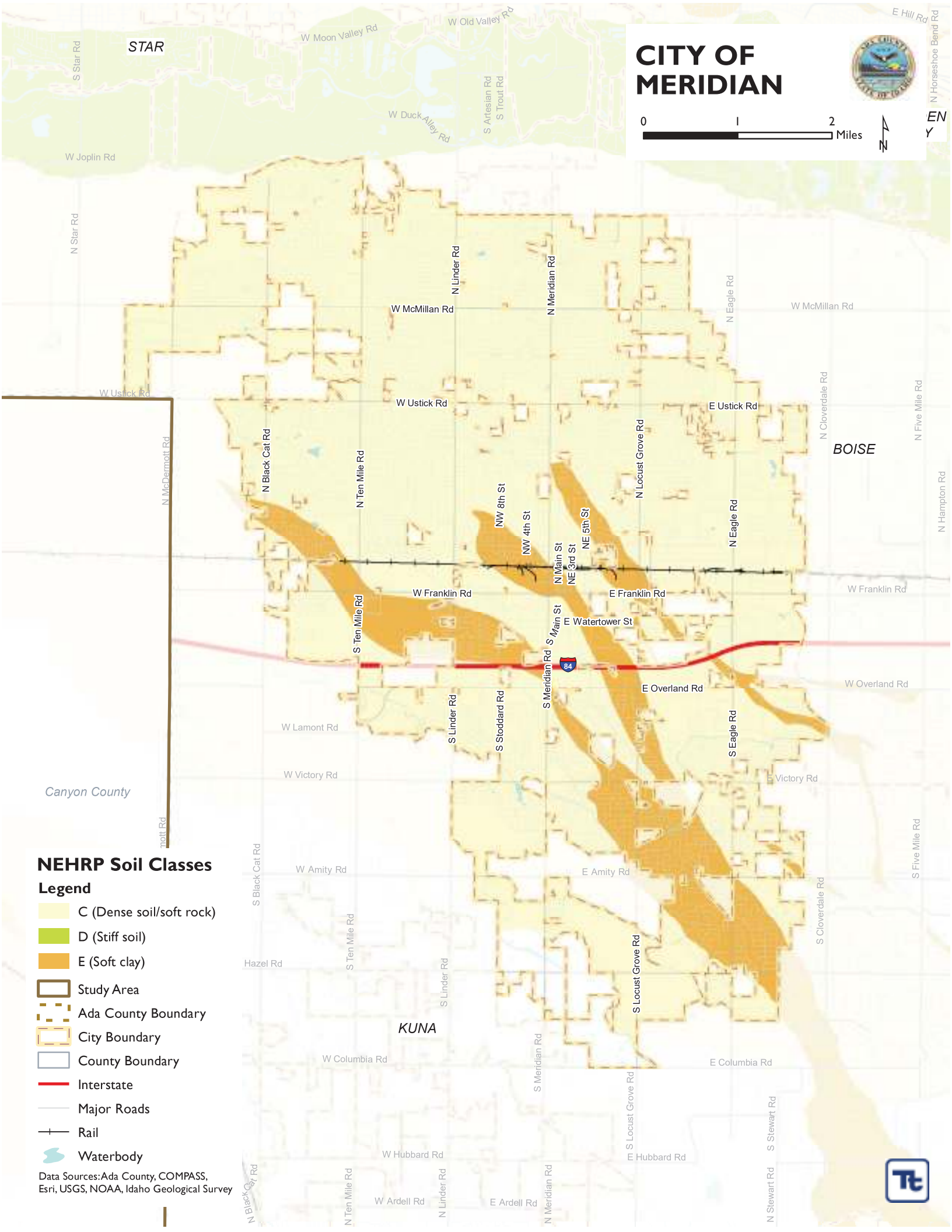
EN
Y

Liquefaction Potential

- Legend**
- Very Low
 - Low
 - Moderate
 - High
 - Very High
 - Study Area
 - Ada County Boundary
 - City Boundary
 - County Boundary
 - Interstate
 - Major Roads
 - Rail
 - Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey





CITY OF MERIDIAN



NEHRP Soil Classes

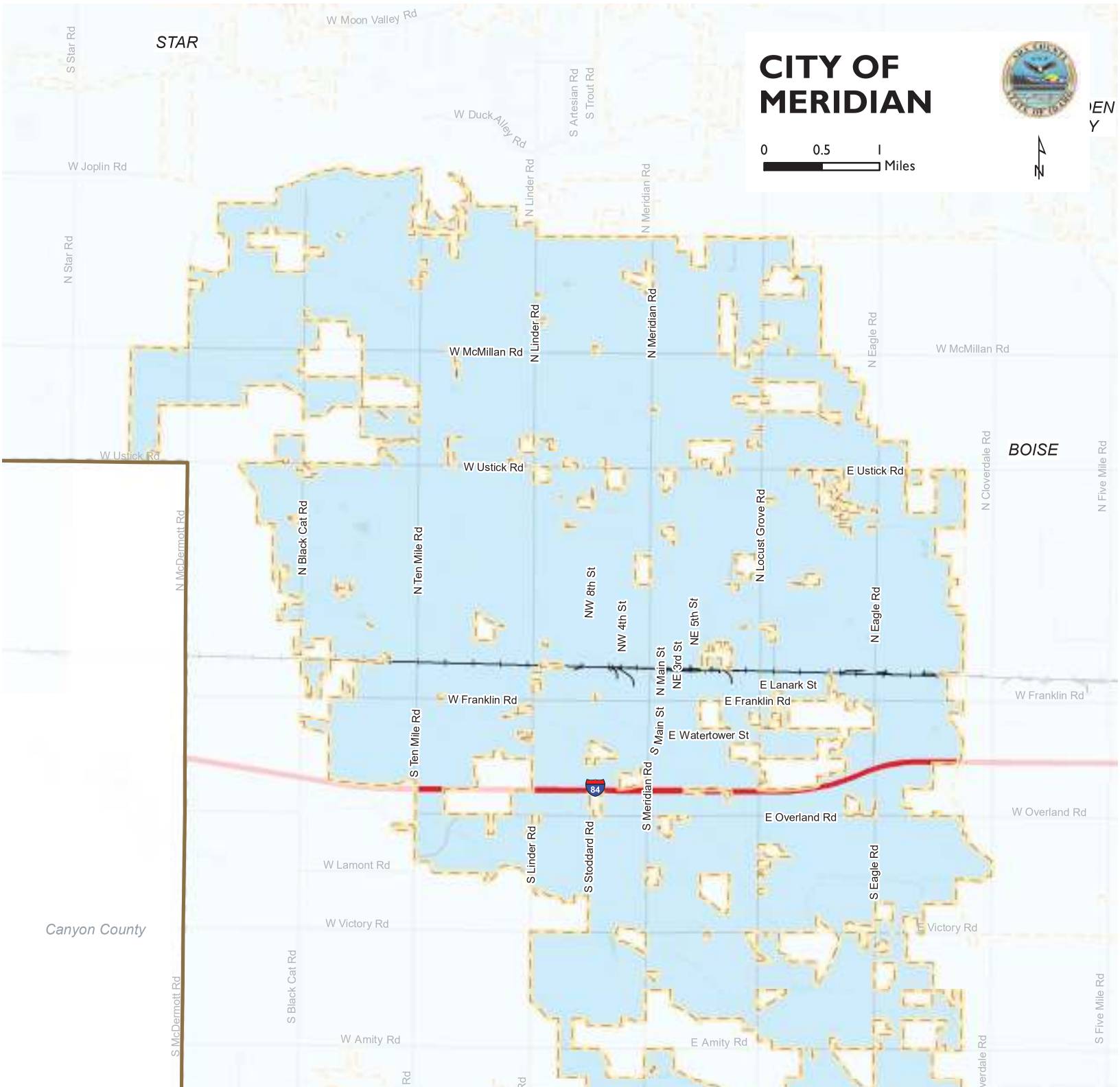
Legend

- C (Dense soil/soft rock)
- D (Stiff soil)
- E (Soft clay)
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF MERIDIAN



100-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

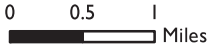
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF MERIDIAN



GARDEN CITY

500-Year Probabilistic Earthquake Scenario

Legend

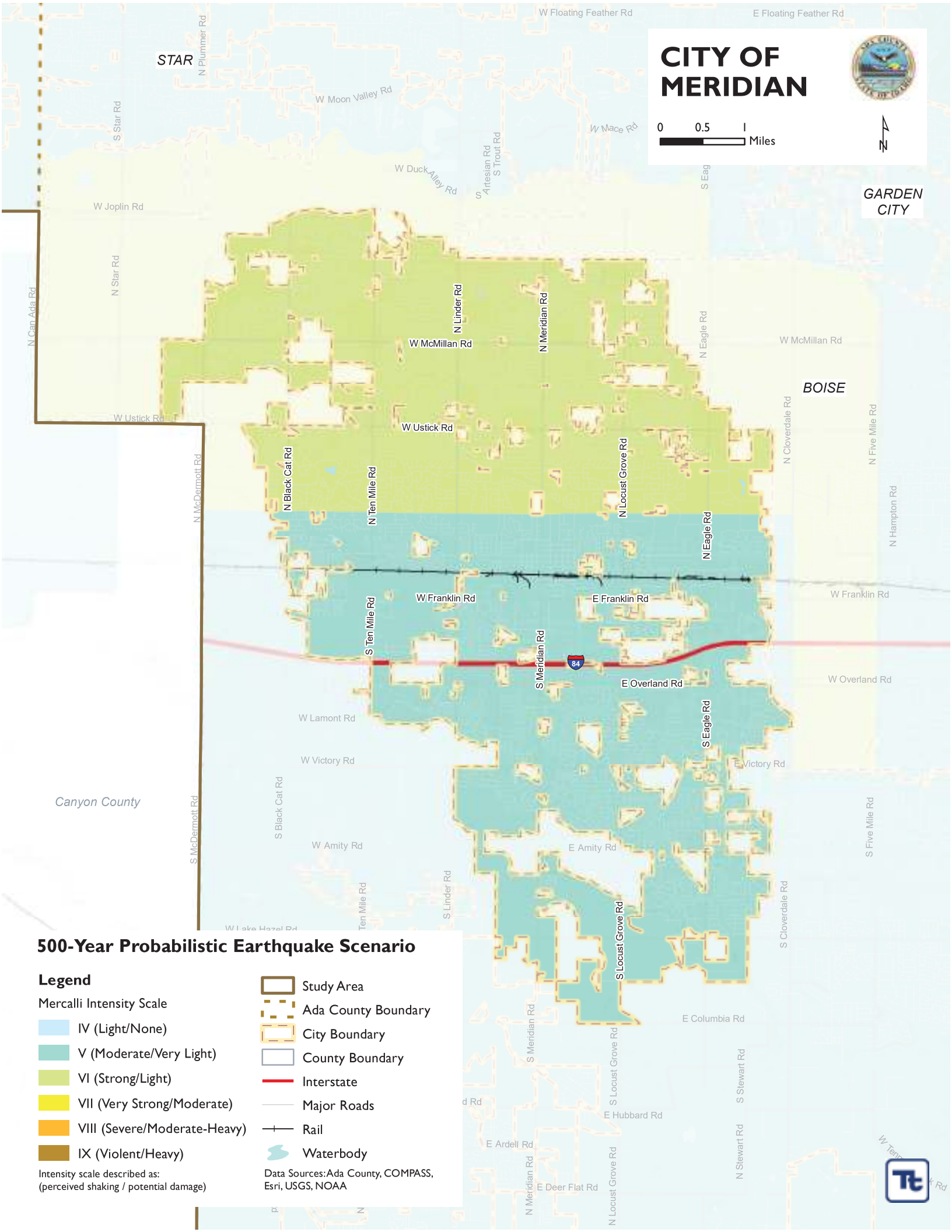
Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

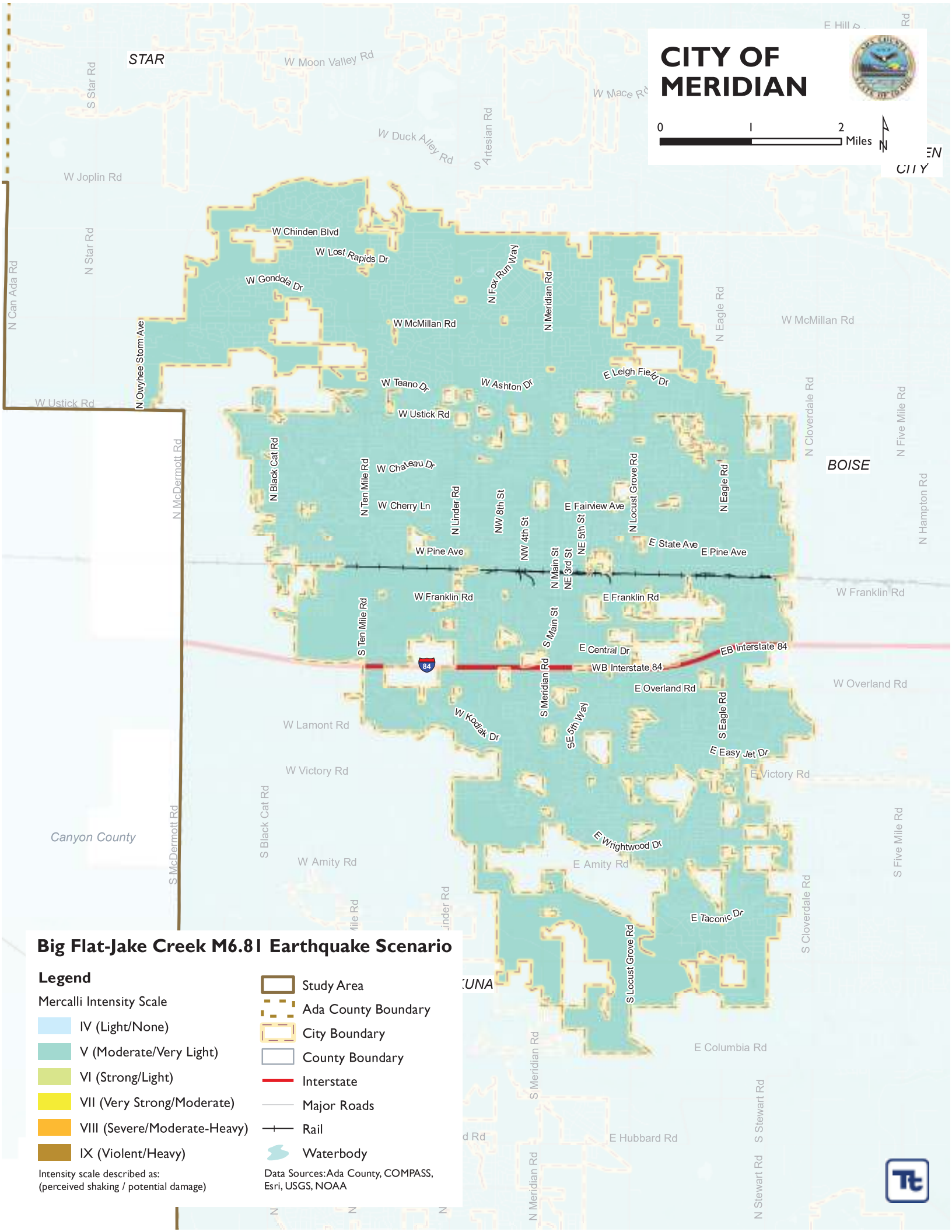
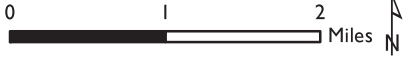
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF MERIDIAN



Big Flat-Jake Creek M6.81 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

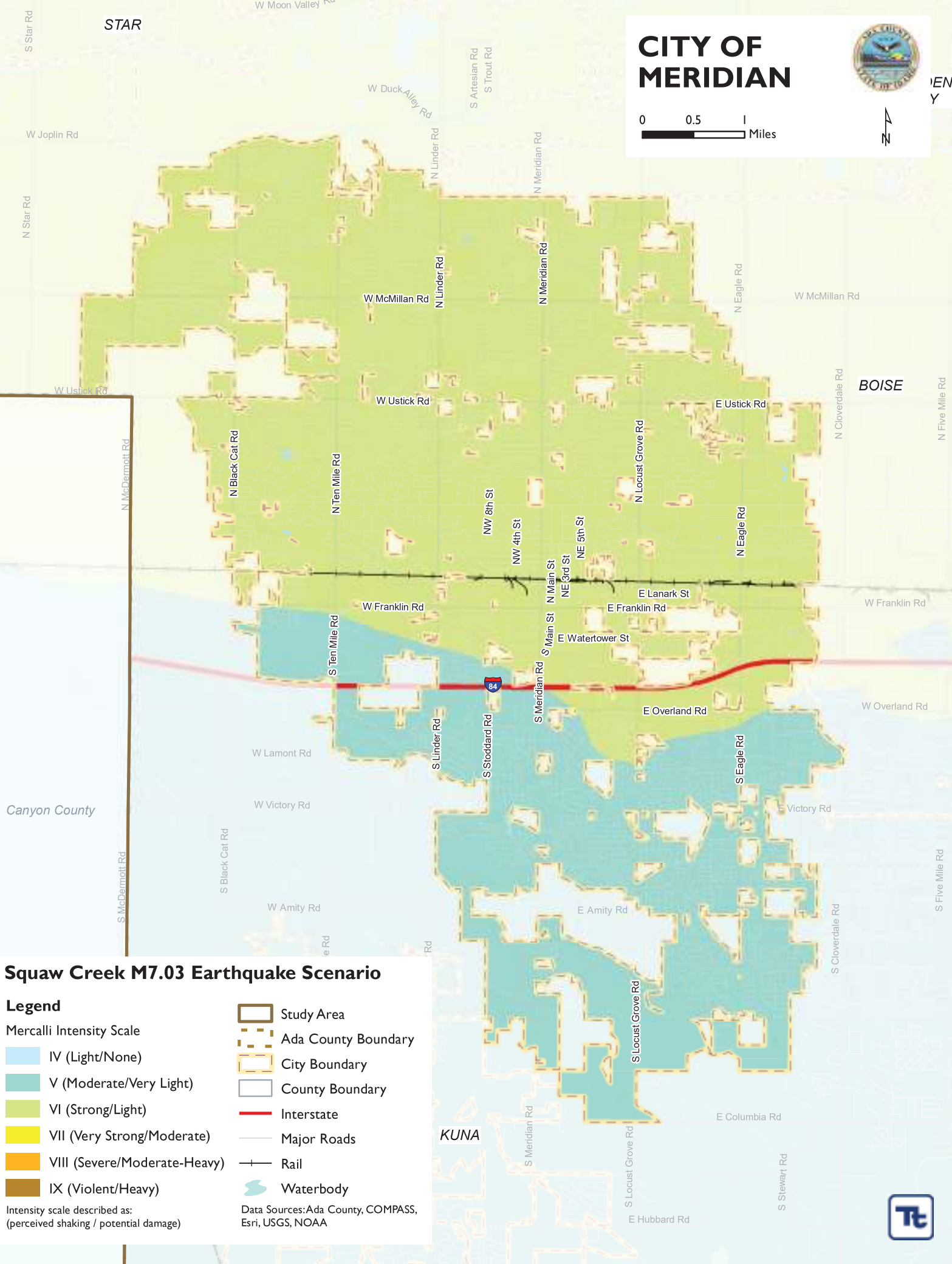
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF MERIDIAN



Squaw Creek M7.03 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

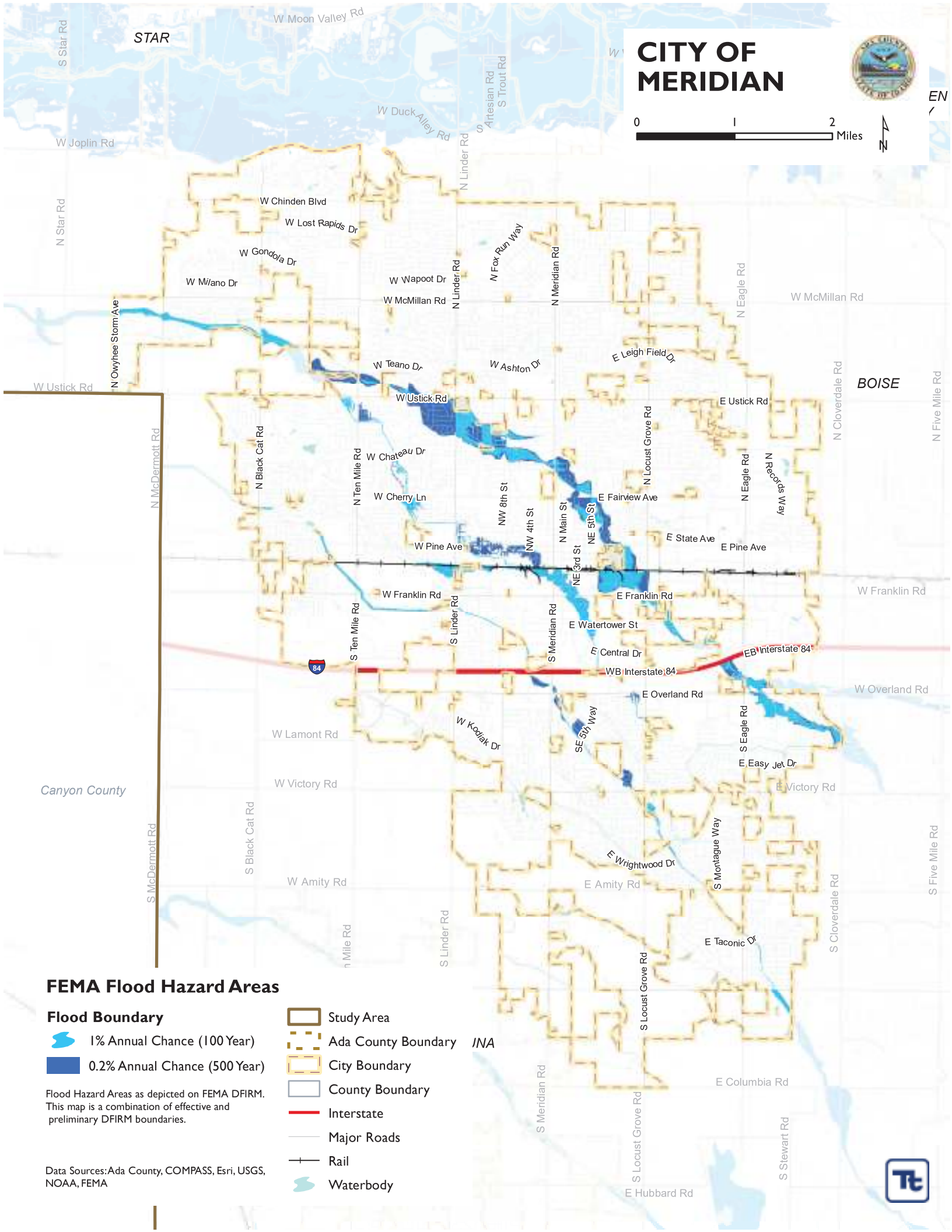
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA





CITY OF MERIDIAN











FEMA Flood Hazard Areas

Flood Boundary

-  1% Annual Chance (100 Year)
-  0.2% Annual Chance (500 Year)

Flood Hazard Areas as depicted on FEMA DFIRM. This map is a combination of effective and preliminary DFIRM boundaries.

-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

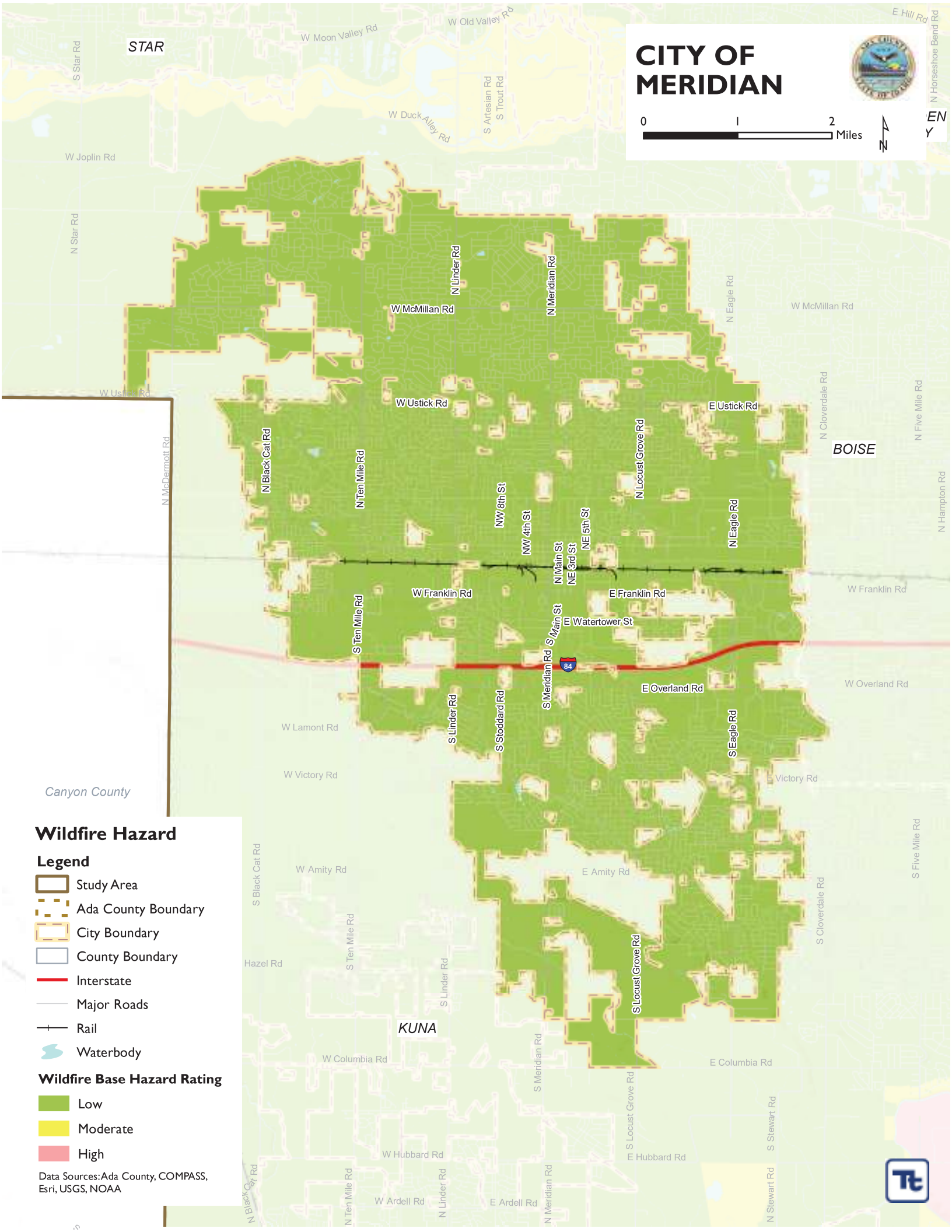
Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, FEMA



CITY OF MERIDIAN



EN
Y



Wildfire Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Wildfire Base Hazard Rating

- Low
- Moderate
- High

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



7. CITY OF STAR

7.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Jacob Qualls, City Clerk / Treasurer
10769 West State Street
PO Box 130
Star, ID 83669
Telephone: 208-908-5452
e-mail Address: jqalls@staridaho.org

Alternate Point of Contact

Trevor A. Chadwick, Mayor
10769 West State Street
PO Box 130
Star, ID 83669
Telephone: 208-286-7247
e-mail Address: tchadwick@staridaho.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 7-1.

Table 7-1. Local Hazard Mitigation Planning Team Members

Name	Title
Jacob Qualls	City Clerk / Treasurer
Trevor Chadwick	Mayor
Shawn Nickel	City Planner
Ryan Field	Assistant City Planner
Bob Little	Buildings & Grounds Maintenance Supervisor
Ryan Morgan	Floodplain Administrator
Dana Partridge	Public Information Officer
Eddie Gomez	Building Permit Technician Lead

7.2 JURISDICTION PROFILE

7.2.1 Location and Features

The City of Star is located on the Boise River 10 miles west of Boise.

The current boundaries generally extend from Highway 20/26 (Chinden), Highway 16, Floating Feather Road, CanAda Road and into Kingsbury within Canyon County, encompassing an area of about 25 square miles.

The City of Star is located approximately 2,467-feet above sea-level and enjoys a mild climate. Star has an annual average precipitation of 11.76-inches. Most of the precipitation occurs between the months of November to May. The average annual snowfall is 9.7-inches, with killing frosts as early as December and as late as February. There

are approximately 212-frost free days in Star from December to March. This allows for a relatively long growing season. Winters in Star, though cold, are generally not severe. Summer days are hot, while nights are relatively cool. The average maximum temperature is 62.9-degrees Fahrenheit and the average minimum temperature is 39.5-degrees Fahrenheit. Northwesterly winds prevail with intermittent southeasterly winds in winter and spring. The climate is favorable for many agricultural pursuits in the area. The current crops in the area vary widely from wheat, oats, corn, beans, mint, hay, pasture, alfalfa and clover seed, to sugar beets, potatoes, and many specialty seed crops.

7.2.2 History

The City of Star was incorporated on December 22, 1905 and dis-incorporated around the 1929 and then reincorporated on December 10, 1997. The first location of the village of Star is approximately one mile to the east of the present City of Star; approximately halfway between the present town of Star and Star Emmett junction. The first schoolhouse was built there in the 1870s on land donated by B.F. Swalley. When the settlers finished building the schoolhouse, they could not decide on a name for the building. One of the men carved out a star and nailed it to the front door; pounding nails all around the edge of the star. This became an important landmark for miles around and was a guide for travelers and miners. When the visitors came to the schoolhouse with the star on the door, they could travel west one mile and find board and lodging for the night. So in time, the town became known as Star. In 1905, Star incorporated and established City limits reaching four miles in all directions. During the early part of the 20th century the town flourished with places growing rapidly and merchants doing good business. The town had a mayor, marshal, constable, and justice of the peace. The jail was a frame building located just east of the Odd fellows Lodge Hall. By the time the new interurban arrived, at least 20 new buildings had been erected.

Rapid growth came with the of the Boise Interurban Railway. Growth continued in 1909 with at least 30 new buildings erected. In the early 1900s, Main Street periodically served as a race track. Horse races were a big event with most everyone and often followed by a baseball game. Impromptu races down Main Street were not limited to specific holidays but could arise from on-the-spot challenges. Other activities included a weekly debating society where issues of the day such as railroads, Sunday laws, and women's rights were discussed. Also, there was a literary society, Star School sporting events, and skating rink. An evening outing for a party of young people included chartering a trolley excursion to Boise and back. Star Trading Days were stock sales held every third Saturday of each month.

7.2.3 Governing Body Format

Star has a strong-mayor form of Municipal Government with four council members. The Council assumes responsibility for the adoption of this plan, and is responsible for its implementation.

7.3 CURRENT TRENDS

7.3.1 Population

According to COMPASS, the population of the City of Star as of April 2022 was 15,230. Since 2017, the population has grown at an average annual rate of 12.8 percent.

7.3.2 Development

- Residential Land Uses—Rural-Urban Interface Issues—Citizens of the Treasure Valley and beyond have been moving to the City of Star and surrounding area. Land, which was part of the Area of City Impact of Star, has been purchased and entitlements have been received for residential development. There are concerns of the farming and the former farming community that they are losing the quaint small rural City. It is recognized that the City of Star is going through a transition, where the rural community is interfacing the urban community.
- Existing Residential Development—Residential land use patterns in the City limits include existing parcels of 1 to 5- acres, single family subdivisions, Planned Unit Development and Master Planned Communities. Housing types include, attached and detached single family dwelling units, patio homes and multi-family dwelling units.
- Civic Land Uses—The Star City hall houses all City offices. The Star Library, which is managed by the Ada County Library District, the Star Water and Sewer District and the Star Fire District Station are located in the Central Business District on Highway 44. The Star Senior Center is located at 102 Main Street.
- Open Spaces—The most important amenity is the Boise River which is located one mile south of Highway 44. It is available for fishing, hiking and viewing of wildlife. Currently, a greenbelt does not exist, but the City has approximately 60-acres along the river for recreation development. Blake Haven Park is located on Star Road across from Star Elementary School. Hunter’s Creek and Pavilion Park are the newest additions to the city’s park system. Pavilion Park has an additional dog park within it called Waggin Tails Dog Park. Some of the new subdivisions have developed open space for their residents, but not all are public facilities. The city is also requiring many of the new developments which abut canals to provide a pathway along these canals and waterways and tie into the city’s pathway system..
- Commercial—Commercial land uses are generally located along Highway 44 and Star Road. A range of professional offices, retail, restaurant and other services are located along these corridors. There are a number of home occupations in Star, but the actual numbers have not been identified.
- Industrial and High Technical Land Uses—Industrial manufacturing or high-tech land uses are currently LIMITED in Star, with the exception of a new development at Highway 44 and Highway 16 in the northwest corner.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 7-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 7-2. Recent and Expected Future Development Trends

Criterion	Response
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	Yes
	2,039.38 acres 896 homes 196 apartments 4,075 open lots
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i>	Yes
	Residential Planning and Building Department

Criterion	Response					
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	Yes Development is planned for 4,500 buildable mixed-use lots encompassing 1,500 acres (approximately 95% residential, 5% commercial, and golf course) in the WUI on the northern boundary of the city.					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	2016	2017	2018	2019	2020	
	Single Family	206	334	269	326	592
	Multi-Family	7	0	0	0	0
	Other	63	73	139	173	109
	Total	276	407	408	499	701
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> 30-40% of new-construction permits are in the flood hazard area. 					
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	The city is approximately 90% built-out, but as private property owners continue to request to be annexed into the city limits of Star; the city is expected to continue to grow in the next five years.					

7.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 7-3.
- Development and permitting capabilities are presented in Table 7-4.
- An assessment of fiscal capabilities is presented in Table 7-5.
- An assessment of administrative and technical capabilities is presented in Table 7-6.
- An assessment of education and outreach capabilities is presented in Table 7-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 7-8.
- Classifications under various community mitigation programs are presented in Table 7-9.

Table 7-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	No	Yes	No
<i>Comment:</i> Title 7.1, Star City Code; Local Land Use Planning Act, Idaho Code 67-6508				
Zoning Code	Yes	No	No	Yes
<i>Comment:</i> Title 8, Star City Code; Local Land Use Planning Act, Idaho Code 67-6508				
Subdivisions	Yes	No	No	No
<i>Comment:</i> Title 8.6, Star City Code; Local Land Use Planning Act, Idaho Code 67-6508				
Stormwater Management	Yes	No	Yes	Yes
<i>Comment:</i> Title 8.4, Star City Code: Local Land Use Planning Act, Idaho Code 67-6508				
Post-Disaster Recovery	No	No	No	No
<i>Comment:</i>				
Real Estate Disclosure	No	No	No	No
<i>Comment:</i>				
Growth Management	No	Yes	No	No
<i>Comment:</i> Ada County Comprehensive Plan, adopted 11/26/2007; Ada Co. Zoning ordinance-Title 8, ACC, adopted 12/8/2010				
Site Plan Review	Yes	No	No	No
<i>Comment:</i> Title 8, Chapter 4-ACC adopted: 12/8/2010				
Environmental Protection	Yes	No	No	Yes
<i>Comment:</i> Titles 3, 5, 7, 8, 10, Star City Code; Local Land Use Planning Act, Idaho Code 67-6508				
Flood Damage Prevention	Yes	No	No	Yes
<i>Comment:</i> Title 10, Star City Code; Local Land Use Planning Act, Idaho Code 67-6508				
Emergency Management	No	Yes	No	Yes
<i>Comment:</i> Ada County Emergency Management Plan				
Climate Change	No	No	No	No
<i>Comment:</i>				
Planning Documents				
General Plan	Yes	No	No	Yes
<i>Is the plan equipped to provide linkage to this mitigation plan?</i> Yes				
<i>Comment:</i> Comprehensive Plan, 2008; It was updated in 2020 with additions and changes and it now called “City of Star Comprehensive Plan – Shining Bright Into the Future – 2040 and Beyond” and 2021 and the Plan is being updated as of the creation of this All-Hazard Mitigation Plan once again in 2022. Additionally, there is a South of the River Sub-Area Plan which was adopted in 2021/2022 as a supplement to the Star Comprehensive Plan.				
Capital Improvement Plan	Yes	Yes	Yes	Yes
<i>How often is the plan updated?</i> As required by law for Impact Fee Implementation and as CIP Projects are completed.				
<i>Comment:</i> The city has many capital improvement plans; which include the city’s own Parks. Other plans the City utilizes are the Canyon Highway District 4 Capital Improvement Plan; Ada County Highway District Capital Improvement policies; Idaho Transportation Capital Improvement Plans and Policies; Star Fire Capital Improvement Plans; Star Water & Sewer District Capital Improvement Plans and; Ada County Sheriff’s Office Capital Improvements Plans which are being developed,				
Disaster Debris Management Plan	No	No	No	No
<i>Comment:</i>				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Floodplain or Watershed Plan <i>Comment:</i> Title 10, Star City Code, 2008 Comprehensive Plan, required under Local Land Use Planning Act, Idaho Code 67-6508. Note: once complete, the Ada County All Hazards Mitigation Plan-update will become the floodplain management plan of record for all communities within the planning area that participate in the CRS program. The City also has updated its Flood Control Code in 2021 – Ordinance 336 (Title 10 of the City of Star Code).	Yes	No	No	Yes
Stormwater Plan <i>Comment:</i> Star City complies with the requirements as per EPA requirements in NPDES, and IDWR requirements. ACHD holds NPDES Permit. City is responsible for Stormwater Pollution Prevention associated with City Projects.	Yes	No	No	Yes
Urban Water Management Plan <i>Comment:</i>	No	No	No	No
Habitat Conservation Plan <i>Comment:</i> Comprehensive Plan – Chapter 9	Yes	No	No	Yes
Economic Development Plan <i>Comment:</i> 2011- Downtown Revitalization Plan	Yes	No	No	Yes
Shoreline Management Plan <i>Comment:</i> Comprehensive Plan – Chapter 9	Yes	No	No	Yes
Community Wildfire Protection Plan <i>Comment:</i> Comprehensive Plan – Chapter 9	No	No	No	Yes
Forest Management Plan <i>Comment:</i>	No	No	No	No
Climate Action Plan <i>Comment:</i> Title 10, Star City Code, 2008 Comprehensive Plan, required under Local Land Use Planning Act, Idaho Code 67-6508. Note: once complete, the Ada County All Hazards Mitigation Plan-update will become the floodplain management plan of record for all communities within the planning area that participate in the CRS program.	Yes	No	No	Yes
Comprehensive Emergency Management Plan <i>Comment:</i>	No	No	No	No
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment:</i>	No	No	No	No
Post-Disaster Recovery Plan <i>Comment:</i>	No	No	No	No
Continuity of Operations Plan <i>Comment:</i>	No	No	No	No
Public Health Plan <i>Comment:</i> Central District Health Department Emergency Operations Plan, 2013	No	Yes	No	No

Table 7-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i>	Yes Planning & Zoning Department
Does your jurisdiction have the ability to track permits by hazard area?	We are developing a computer system to help track. Currently we are using local knowledge, city engineer to help identify these areas.
Does your jurisdiction have a buildable lands inventory?	Yes

Table 7-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
<i>If yes, specify:</i>	
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	None
<i>If yes, specify:</i>	

Table 7-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Building & Planning Department	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Building & Planning Department	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Building & Planning Department	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Can contract with County	Yes
Surveyors <i>If Yes, Department /Position:</i> Planning / City Engineer (hired and contracted)	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i>	No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Can contract with County	Yes
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management	Yes
Grant writers <i>If Yes, Department /Position:</i> Can contract with County	Yes
Other <i>If Yes, Department /Position:</i>	No

Table 7-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i>	No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Facebook, Instagram, Website, Mailchimp, Star Courier	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> We are developing processes to reverse 911 and communicate with our citizens as needed during an emergency.	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 7-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Planning
Who is your floodplain administrator? (department/position)	Planning / Engineer / City Clerk
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	05/04/2021
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> 2-foot freeboard, more open space than federal requirements, surface utilities are required to be 6" above BFE.	Exceeds
When was the most recent Community Assistance Visit or Community Assistance Contact?	CAV 1/24/2007, CAC 4/10/2008 \Update
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i>	No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i>	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i>	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> General floodplain management training.	Yes
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> <i>If no, is your jurisdiction interested in joining the CRS program?</i> Yes	No
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> \$25,245,100 <i>What is the premium in force?</i> \$53,249	80
How many total loss claims have been filed in your jurisdiction? ^a <i>What were the total payments for losses?</i> \$0	0

a. According to FEMA statistics as of March 31, 2022

Table 7-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	1600176870	N/A
DUNS #	Yes	788973753	N/A
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	10/10	N/A
Public Protection	Yes	4/9	N/A
Storm Ready	Yes	Blue	N/A
Firewise	No	N/A	N/A
Tsunami Ready	No	N/A	N/A

7.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

7.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City of Star Comprehensive Plan**—The 2021 Comprehensive Plan includes mitigation related policies as they relate to the protection of human life and property from natural hazard events.
- **Star City Code**—The city code defines construction regulations for areas of the City within a floodplain.
- **Ada County Comprehensive Plan**—The Comprehensive Plan for Ada County currently includes mitigation related policies as they relate to the protection of human life and property from flood events. Additionally, the Comprehensive plan addresses the need for natural resource protection and the identification of known hazards within the County.
- **Ada County Wildfire Response Plan**—The Wildfire Response Plan for Ada County includes procedures that will mitigate risk to human life and property from a wildfire.

7.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Star City, Star Sewer & Water District, and Star Joint Fire Protection District Joint Emergency Operation Plan (EOP)**—This joint plan has not been developed, but the Multi-Hazard Mitigation Plan hazard and risk data will inform the EOP.

- City of Star Continuity of Operation Plan (COOP)—This plan has not been developed, but the Multi-Hazard Mitigation Plan hazard and risk data will inform the COOP.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

7.6 RISK ASSESSMENT

7.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 7-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 7-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	1/20/2020 - ongoing	N/A
Flooding	DR-4342	March 29 – June 15, 2017	Public Assistance Countywide: \$4,493,792
Hail	N/A	3/21/2016	One-inch hail
Hail	N/A	5/26/2015	Hail up to 1.5 inches at Floating Feather Road and Pollard Lane
Severe Wind	N/A	3/29/2009	\$33,000 (countywide)
Severe Wind	N/A	4/27/1995	\$50,000 (countywide)
Borah Peak M7.3 Earthquake	N/A	1988	-
Flooding	N/A	6/1983	\$147,000 (countywide)
Hebgen Lake M7.5 Earthquake	N/A	1959	-
Flooding	N/A	1943	Unknown

7.6.2 Hazard Risk Ranking

Table 7-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 7-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Dam/Canal Failure	18	Medium
3	Flood	18	Medium
4	Earthquake	16	Medium
5	Landslide	12	Low
6	Wildfire	12	Low
7	Drought	9	Low
8	Volcano	6	Low

7.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: N/A

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- County levee along Boise River in Star area is not functional or maintained.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

7.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 7-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action S-1 —Consider participation in the Community Rating System <i>Comment: Still pending consideration.</i>			✓	S-9
Action S-2 —Integrate Multi-Hazard Mitigation Plan into City of Star Comprehensive Plan <i>Comment: Once adopted it will be in the new update of the comprehensive plan adopted by council resolution</i>	✓			
Action S-3 —Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern. <i>Comment: May 4, 2021 – Title 10 of the Star City Code</i>	✓			
Action S-4 —Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority. <i>Comment: No properties have been identified yet.</i>			✓	S-1

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action S-5—Evaluate riverbank integrity of the Boise River in the areas of interface with buildings and infrastructure. Determine and employ the best methodology to either repair damaged areas or harden other areas that may directly threaten buildings or infrastructure during high flow events.</p> <p><i>Comment: Working with FCD 10 to identify and make improvements.</i></p>			✓	S-10
<p>Action S-6—Develop a Joint Emergency Operation Plan with Star City and Star Joint Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Star will lead this all-discipline action, but Star Sewer & Water District will aid in planning for all hazards.</p> <p><i>Comment: Need to review and edit the 2014 EOP as needed per AAR's from exercises and real world events.</i></p>			✓	S-7
<p>Action S-7—Develop a Continuity of Operation Plan: This plan will provide specific policies and procedures that will be carried out in the event of an emergency, including localized acts of nature, accidents, and technological or attack-related emergencies. The plan will address how the District will continue to perform essential functions in the event of compromised facilities or leadership, and how the District will return to normal operations.</p> <p><i>Comment: Carry over. Will address when staff time is available.</i></p>			✓	S-8
<p>Action S-8—Support County-wide Initiatives Identified in Volume 1 of the Multi-Hazard Mitigation Plan</p> <p><i>Comment: Ongoing</i></p>			✓	
<p>Action S-9—Actively Participate in the Plan Maintenance Protocols Outlines in Volume 1 of the Multi-Hazard Mitigation Plan</p> <p><i>Comment: Ongoing</i></p>			✓	S-3
<p>Action S-10—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include but are not limited to; enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.</p> <p><i>Comment: May 5, 2021 – Title 10 of the Star City Code</i></p>			✓	S-4
<p>Action S-11—Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach.</p> <p><i>Comment: Ongoing effort in partnership with Star Joint Fire District.</i></p>			✓	S-11

7.8 HAZARD MITIGATION ACTION PLAN

Table 7-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 7-14 identifies the priority for each action. Table 7-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 7-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action S-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire</p>						
Existing	3, 8, 9	Star Building Department	N/A	High	HMGP, BRIC, FMA	Short-term
<p>Action S-2— Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire, Drought</p>						
New & Existing	2, 5, 6	Planning	N/A	Low	Staff Time, General Funds	Ongoing
<p>Action S-3—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire, Drought, Volcano</p>						
New & Existing	1, 2, 6, 7, 8, 9, 10	City of Star	N/A	Low	Staff Time, General Funds	Short-term
<p>Action S-4—Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:</p> <ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. <p><u>Hazards Mitigated:</u> Flood</p>						
New & Existing	1, 2, 4, 5, 6, 8	Planning	N/A	Low	Staff Time, General Funds	Ongoing
<p>Action S-5—Identify and pursue strategies to increase adaptive capacity to climate change.</p> <p><u>Hazards Mitigated:</u> Drought, Flood, Extreme Weather, Wildfire</p>						
New & Existing	2, 3, 4, 6, 9, 10	Public Works	N/A	Low	Staff Time, General Funds	Short-term
<p>Action S-6— Purchase generators for critical facilities and infrastructure that lack adequate backup power.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire</p>						
Existing	1, 3, 10	Public Works	N/A	High	HMGP, BRIC	Short-term
<p>Action S-7— Develop a Joint Emergency Operation Plan with the City of Star, Star Sewer and Water District, and Star Joint Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Star will lead this all-discipline action, but Star Sewer and Water District and Star Joint Fire Protection District will aid in planning for all hazards. (Coordinates with Star Sewer and Water District Action SSW-4 and Star Joint Fire Protection District SFD-5)</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire, Drought, Volcano</p>						
New & Existing	All	City of Star	SSW District, Star Joint Fire Protection District	Low	City Funds, District Funds, HMGP	Short-term
<p>Action S-8— Develop a Continuity of Operation Plan: This plan will provide specific policies and procedures that will be carried out in the event of an emergency, including localized acts of nature, accidents, and technological or attack-related emergencies.</p> <p><u>Hazards Mitigated:</u> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire, Drought, Volcano</p>						
New & Existing	All	City of Star	N/A	Medium	City Funds, HMGP	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action S-9 — Consider feasibility of participation in the Community Rating System						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 2, 4, 5, 6, 7, 8, 9	City of Star	N/A	Low	General Fund, Surface Water Utility Fund	Short-term
Action S-10 — Evaluate riverbank integrity of the Boise River in the areas of interface with buildings and infrastructure. Determine and employ the best methodology to either repair damaged areas or harden other areas that may directly threaten buildings or infrastructure during high flow events. (Coordinates with Flood Control District #10 Action FCD10-16)						
<i>Hazards Mitigated:</i> Flood, Severe Weather, Dam/Canal Failure						
New & Existing	1, 2, 9, 10	City of Star	FCD#10	Medium	HMGP, FCD #10, City of Star CIP Funding	Long-term
Action S-11 — Increase GIS capacity by providing training for existing staff or hiring staff to support GIS needs.						
<i>Hazards Mitigated:</i> Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Wildfire, Drought, Volcano						
New & Existing	1, 2, 7	City of Star	N/A	Medium	City Funds	Short-term
Action S-12 — Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach. (Coordinates with Star Joint Fire Protection District Action SFD-6)						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	8, 9	City of Star	Star Joint Fire Protection District	Low	City Funds, District Funds	Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 7-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	No	Yes	High	Low
3	3	Low	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	7	Medium	Low	Yes	No	Yes	High	Medium
6	3	High	Medium	Yes	Yes	No	Medium	High
7	10	Low	Low	Yes	Yes	No	High	Medium
8	10	Low	Low	Yes	Yes	No	High	Medium
9	8	Medium	Low	Yes	No	Yes	High	Low
10	4	Medium	Medium	Yes	Yes	No	Medium	Medium
11	3	Low	Low	Yes	No	Yes	High	Low
12	2	Low	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 7-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather	S-2	S-1			S-6, 7, 8	S-10	S-5	S-2, 3, 5, 7, 8, 10, 11
Medium-Risk Hazards								
Dam/Canal Failure	S-2	S-1			S-6, 7, 8	S-10		S-2, 3, 7, 8, 10, 11
Flood	S-2, 4, 9	S-1, 9	S-4		S-6, 7, 8	S-10	S-5	S-2, 3, 4, 5, 7, 8, 9, 10, 11
Earthquake	S-2	S-1			S-6, 7, 8			S-2, 3, 7, 8, 11
Low-Risk Hazards								
Landslide	S-2	S-1			S-6, 7, 8		S-5	S-2, 3, 5, 7, 8, 11
Wildfire	S-2	S-1	S-12		S-6, 7, 8			S-2, 3, 7, 8, 11
Drought	S-2				S-7, 8		S-5	S-2, 3, 5, 7, 8, 11
Volcano					S-7, 8			S-3, 7, 8, 11

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

7.9 PUBLIC OUTREACH

Table 7-16 lists public outreach activities for this jurisdiction.

Table 7-16. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
South of the River Plan community involvement	April, 2021	200+ at one event
Continually of adoption of ordinances and annexations	ongoing	500+
New updates to the Comprehensive Plan - mailing to 6,443 households & commercial businesses (2.9 factor)	June 2022 - planned	approximately 18,000 people reach
Monthly newsletter to all rooftops and PO boxes within zip code utilizing Star Courier and email blasts, social media interactions	Ongoing	1800 email addresses

7.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **City of Star Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.

- **City of Star Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

W Chaparral Rd

CITY OF STAR



0 0.75 1.5 Miles



EAGLE

Canyon County

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

N Lanewood Rd

W Gambrell St
N Star Rd

W State St

S Star Rd
W Main St

W Moon Valley Rd

W Duck Alley Rd

W Joplin Rd

N Cain Ada Rd

N Star Rd

MERIDIAN

W McMillan Rd

N McDermott Rd

N Black Cat Rd

N Ten Mile Rd

W Ustick Rd

Lucky Peak Dam Failure Inundation Area

Legend

Maximum Pool Inundation Area

Area inundated by dam failure occurring when pool elevation is at the top of the impounding structure.

Study Area

Ada County Boundary

City Boundary

County Boundary

Interstate

Major Roads

Rail

Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, IDWR



CITY OF STAR



0 0.7 1.4 Miles



Canyon County

EAGLE

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

W Gambrell St

N Star Rd

W State St

S Star Rd
W Main St

W Moon Valley Rd

W Joplin Rd

MERIDIAN

N Can-Ada Rd

N Star Rd

W McMillan Rd

N McDermott Rd

N Black Cat Rd

N Ten Mile Rd

W Ustick Rd

Liquefaction Potential

Legend

- Very Low
- Low
- Moderate
- High
- Very High
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF STAR



0 0.7 1.4 Miles



Canyon County

EAGLE

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

W Gambrell St

N Star Rd

W State St

S Star Rd

S Wain St

W Moon Valley Rd

W Joplin Rd

MERIDIAN

N Cam Ada Rd

N Star Rd

W McMillan Rd

N McDermott Rd










N Black Cat Rd

N Ten Mile Rd

W Ustick Rd

NEHRP Soil Classes

Legend

-  C (Dense soil/soft rock)
-  D (Stiff soil)
-  E (Soft clay)
-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, Idaho Geological Survey



CITY OF STAR



0 0.5 1 Miles



Canyon County

EAGLE

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

W Gambrell St

N Star Rd

W State St

S Star Rd

W Main St

W Moon Valley Rd

W Joplin Rd

N Star Rd

MERIDIAN

W McMillan Rd

N McDermott Rd

N Black Cat Rd

N Ten Mile Rd

W Ustick Rd

100-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

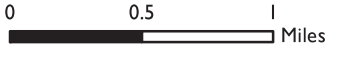
Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

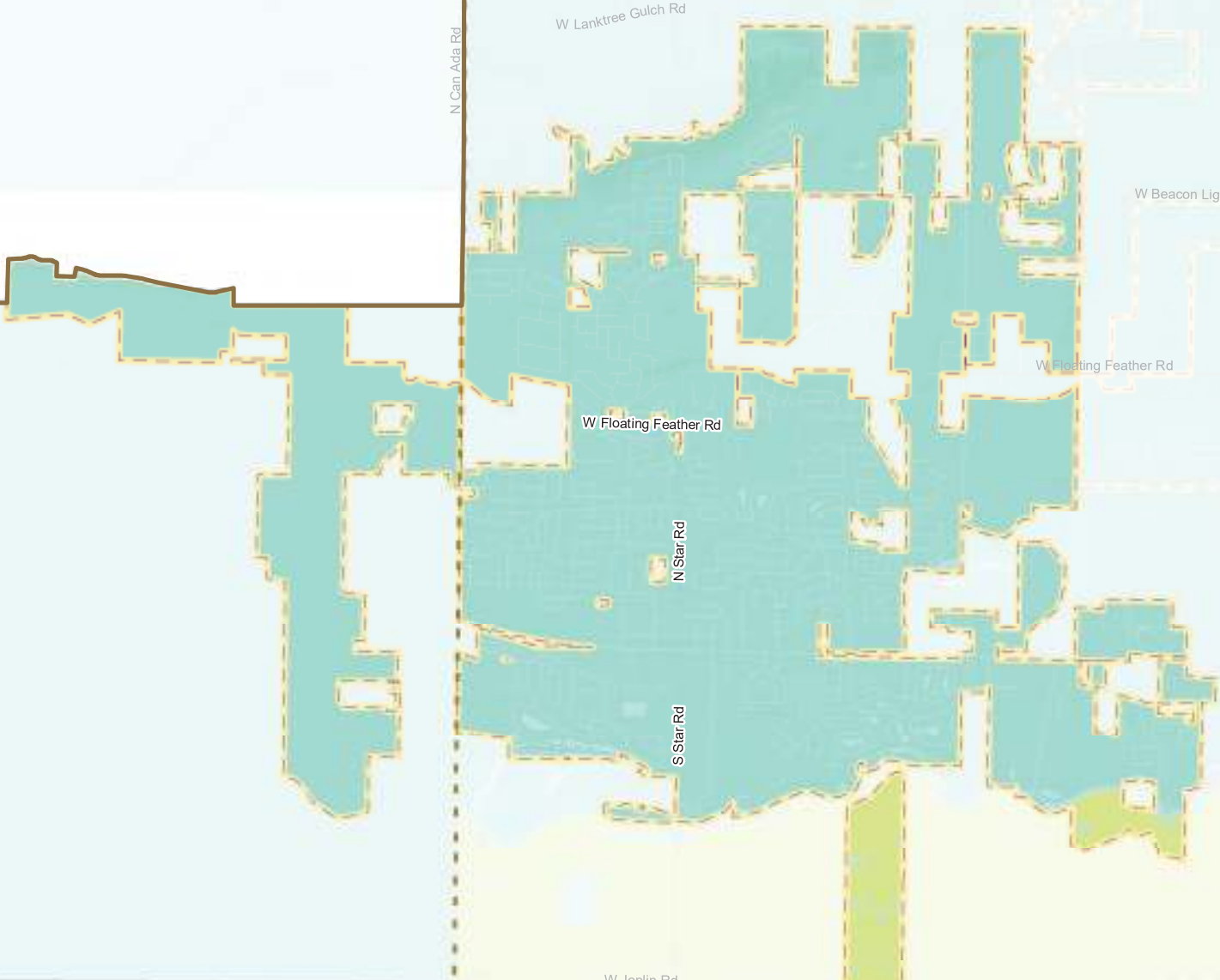


CITY OF STAR



Canyon County

EAGLE



500-Year Probabilistic Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

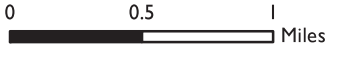
- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA

MERIDIAN



CITY OF STAR



Canyon County

EAGLE

N Can. Ada Rd

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

N Star Rd

S Star Rd

W Joplin Rd

N Star Rd

N McDermott Rd

MERIDIAN

N Black Cat Rd

W McMillan Rd

Big Flat-Jake Creek M6.8I Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF STAR



0 0.5 1 Miles



Canyon County

EAGLE

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

W Gambrell St

N Star Rd

W State St

S Star Rd

W Main St

W Moon Valley Rd

W Joplin Rd

N Star Rd

MERIDIAN

W McMillan Rd

N Black Cat Rd

N Ten Mile Rd

N McDermott Rd

Squaw Creek M7.03 Earthquake Scenario

Legend

Mercalli Intensity Scale

- IV (Light/None)
- V (Moderate/Very Light)
- VI (Strong/Light)
- VII (Very Strong/Moderate)
- VIII (Severe/Moderate-Heavy)
- IX (Violent/Heavy)

Intensity scale described as:
(perceived shaking / potential damage)

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- + Rail
- Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF STAR



0 0.5 1 Miles



Canyon County

W Lanktree Gulch Rd

EAGLE

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

N Star Rd

S Star Rd

W Joplin Rd

N Star Rd

N McDermott Rd



N Black Cat Rd

MERIDIAN









W McMillan Rd

FEMA Flood Hazard Areas

Flood Boundary

-  1% Annual Chance (100 Year)
-  0.2% Annual Chance (500 Year)

Flood Hazard Areas as depicted on FEMA DFIRM. This map is a combination of effective and preliminary DFIRM boundaries.

-  Study Area
-  Ada County Boundary
-  City Boundary
-  County Boundary
-  Interstate
-  Major Roads
-  Rail
-  Waterbody

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA, FEMA



CITY OF STAR



0 0.7 1.4 Miles



Canyon County

EAGLE

W Chaparral Rd
W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

W Gambrell St

N Star Rd

W State St

S Star Rd

S Main St

W Moon Valley Rd

W Joplin Rd

MERIDIAN

N Cam Ada Rd

N Star Rd

W McMillan Rd

N McDermott Rd

N Black Cat Rd

N Ten Mile Rd

W Ustick Rd

Landslide Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Slope

- 15 – 30%
- Greater than 30%

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



CITY OF STAR



0 0.7 1.4 Miles



Canyon County

EAGLE

W Chaparral Rd

W Lanktree Gulch Rd

N Hartley Rd

W Beacon Light Rd

W Floating Feather Rd

W Floating Feather Rd

W Gambrell St

N Star Rd

W State St

S Star Rd

S Wain St

W Moon Valley Rd

W Joplin Rd

MERIDIAN

N Cam Ada Rd

N Star Rd

W McMillan Rd

N McDermott Rd

N Black Cat Rd

N Ten Mile Rd

W Ustick Rd

Wildfire Hazard

Legend

- Study Area
- Ada County Boundary
- City Boundary
- County Boundary
- Interstate
- Major Roads
- Rail
- Waterbody

Wildfire Base Hazard Rating

- Low
- Moderate
- High

Data Sources: Ada County, COMPASS, Esri, USGS, NOAA



8. ADA COUNTY HIGHWAY DISTRICT

8.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Lloyd Carnegie, Maintenance Manager
 3775 Adams Street
 Garden City, ID 83714
 Telephone: 208-387-6319
 e-mail Address: lcarnegie@achdidaho.org

Alternate Point of Contact

Dale Kuperus, District Engineer
 3775 Adams Street
 Garden City, ID 83714
 Telephone: 208-387-6222
 e-mail Address: dkuperus@achdidaho.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 8-1.

Table 8-1. Local Hazard Mitigation Planning Team Members

Name	Title
Tom Ferch	Transportation Funding Coordinator
Lloyd Carnegie	Maintenance Manager
Dale Kuperus	District Engineer

8.2 JURISDICTION PROFILE

8.2.1 Overview

The Ada County Highway District (ACHD) owns and maintains 5,274 lane miles of roads and streets and approximately 826 bridges in Ada County with an estimated non-depreciated value of \$2.125 billion. ACHD was established by referendum on May 25, 1971 and commenced operations on January 1, 1972. It is a separate unit of local government responsible for all roads, bridges, streets, alleys and public rights-of-way in Ada County, except for those designated as part of the state or federal Highway system. ACHD has approximately 383 employees. Funding comes from various sources including property taxes, State Highway Users Funds, Development Impact Fees, cost sharing payments, Ada County Registration Fees, State Sales Tax and other miscellaneous sources. ACHD is governed by a five-member Commission.

The ACHD Commission assumes responsibility for the adoption of this plan; The ACHD Director will oversee its implementation.

8.2.2 Service Area

The district serves a population of 518,300 as of 2021. Its service area covers an area of 1,060 square miles, which has a total value of \$68,519,741,700.

8.2.3 Assets

Table 8-2 summarizes the assets of the District and their value.

Table 8-2. Special Purpose District Assets	
Asset	Value
Property	
227 acres of land	\$30,776,000
Equipment	
(1) Forklift	\$140,000
(4) Graders	\$1,800,000
(5) Backhoe / Excavators	\$800,000
(6) Platform / Bucket Trucks	\$1,150,000
(1) Crane Truck	\$350,000
(2) Heavy Duty Tractors	\$300,000
(6) Dump Trucks – 5 yard	\$1,440,000
(46) Heavy Duty TA Dump Trucks – 12 Yard	\$11,270,000
(7) Heavy Duty Vacuum Trucks	\$3,710,000
(11) Mechanical Sweepers	\$4,015,000
(23) Vacuum Sweepers	\$8,395,000
(7) Track Excavators	\$1,075,000
(1) Dozer	\$500,000
(7) Wheel Loaders	\$2,450,000
(14) Rollers	\$1,750,000
(3) Skid Steers	\$240,000
(4) Forklifts	\$500,000
(17) Air Compressors	\$510,000
(6) Arrow Board Trailers	\$36,000
(4) Flood Light Trailers	\$120,000
(5) Message Board Trailers	\$100,000
(9) Large Equipment Trailers	\$315,000
(1) Low Boy Trailer	\$50,000
(6) Pup Trailers	\$390,000
(1) Trash Compactor	\$80,000
Total:	\$41,486,000
Critical Facilities	
Traffic Signal Junction Building	\$19,000
A-5 Kit Mobile Office/Utility Retreat	\$70,000
A-10 Communication Tower	\$15,000
A-10 Traffic Operations Building	\$761,000
A-11 Carpentry Shop	\$16,000
A-12 Shop 3	\$38,000
A-13 Shop 4	\$205,000
A-14 Shop 2	\$565,000
A-15 Salt Shed	\$21,000
A-21 Salt/Sand Shed	\$300,000
A-8 Shop 1	\$380,000
A-9 Fleet Services	\$35,000

Asset	Value
A-7 Maintenance Office	\$380,000
Pump/Shed/Well	\$5,000
A-1 Office Space	\$2,630,000
A-16 Warehouse	\$123,000
A-2 Administration Building	\$2,020,000
Cooling Tower	\$84,897
Hazardous Material Storage	\$23,000
C-1 Office and Shop	\$870,000
C-2 Drainage Shed	\$300,000
C-3 Tire Shop	\$242,000
C-4 Carpenter Shop & Parking Bays	\$346,000
C-5 Decant Station	\$18,000
C-6 Wash Bay	\$112,000
C-7 Salt Storage Shed	\$17,000
Communication Tower	\$15,000
Salt/Sand Shed	\$687,264
Shop	\$49,000
Office Building	\$534,000
Dwelling 5513	\$270,000
Storage Shed with Pump	\$55,000
Total:	\$11,206,161

8.3 CURRENT TRENDS

According to COMPASS, Ada County experienced an annual population increase of 3.1% between 2011 and 2021. That trend is expected to increase as economic growth continues.

8.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 8-3.
- An assessment of fiscal capabilities is presented in Table 8-4.
- An assessment of administrative and technical capabilities is presented in Table 8-5.
- An assessment of education and outreach capabilities is presented in Table 8-6.
- Classifications under various community mitigation programs are presented in Table 8-7.

Table 8-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
ACHD Capital Improvement Plan	August 19, 2020	N/A
Resolution 812 – ACHD Standard Operating Plan for Right-of-Way Spill, Container, and Debris Response	February 1, 2021	N/A
Sections 7000, 7100, and 7200 of the ACHD Policy Manual pertaining to Land Development Requirements	December 16, 2020	N/A
Sections 8000, 8200, and 8300 of the ACHD Policy Manual pertaining to Stormwater Management and Discharge Requirements	December 16, 2020	N/A
ACHD Integrated Five Year Work Plan	January 26, 2022	N/A

Table 8-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes

If yes, specify: Vehicle Registration Fees, Special Impact Fees, Gas Tax, Sales Tax, Highway User Fund Fees

Table 8-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Development Services, Capital Projects, and Planning Departments	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Engineering, Maintenance, and Capital Projects Departments	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Engineering and Maintenance Departments	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Accounting and Capital Projects	Yes
Surveyors <i>If Yes, Department /Position:</i> Engineering Department	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> GIS Department	Yes
Scientist familiar with natural hazards in local area	No
Emergency manager	No
Grant writers <i>If Yes, Department /Position:</i> Planning Department	Yes

Table 8-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website?	No
Do you use social media for hazard mitigation education and outreach?	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	No
Do you have any other programs in place that could be used to communicate hazard-related information?	Yes
<i>If yes, briefly describe:</i> Facebook, Instagram, Twitter, ACHD Website, Media Releases	
Do you have any established warning systems for hazard events?	Yes
<i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	

Table 8-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	16001	N/A
DUNS#	Yes	099312712	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	N/A	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

8.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

8.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **ACHD Integrated Five Year Work Plan** - Sets forth the strategies, projects (roads, intersections, and bridges), and priorities which ACHD will pursue over the next five years.
- **ACHD Capital Improvement Plan (CIP)** - A long-range transportation plan (20 years) identifying existing transportation facilities and any existing deficiencies, identifying future network deficiencies, and identifying capacity expansion projects on arterial roads and intersections of arterial roads that are eligible for impact fees.

8.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- ACHD Strategic Plan** - The first focus area (Looking Ahead) establishes a planning framework for ACHD. This framework includes a discussion of common values that ACHD shares with its partner agencies, a description of context and demographics for Ada County, and goals and objectives. The second focus area (Moving Forward) concentrates on asset management and resource allocation. The Plan also contains action items and policy guidance that will help ACHD staff implement Commission directives. The goals, objectives, and action items in the Hazard Mitigation Plan may be used to inform the strategic plan.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

8.6 RISK ASSESSMENT

8.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 8-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 8-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Flood	DR-4534	March 2017	Flooding of Boise River in Boise, Eagle Island and Garden City
Landslide	N/A	February 2016	Alto Via Court Closed by Commission
Flood	N/A	April 2014	Flooding of Dry Creek
Flood	N/A	May 2012	\$40,145 Flooding of Little Pioneer Irrigation Ditch
Flood	N/A	December 2009	Flooding of Boise River in Boise
Wildfire	N/A	August 2008	Oregon Trail Fire in SE Boise
Flood	N/A	April 2006	Flooding of Dry Creek
Flood	N/A	September 1997	Flooding of Crane Creek and Hulls Gulch
Flood	N/A	May 1993	Flooding of Boise River in Eagle
Flood	N/A	February 1986	Flooding of Cottonwood Creek
Flood	N/A	June 1983	Flooding in Boise, Garden City, and Eagle Island
Flood	N/A	January 1979	Flooding and erosion of Crane Creek, Polecat Gulch, Stewart Gulch, Cottonwood Creek, and Three Mile, Five Mile, Eight Mile, and Ten Mile Creeks

8.6.2 Hazard Risk Ranking

Table 8-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	45	High
2	Earthquake	36	High
3	Severe Weather	33	High
4	Landslide	16	Medium
5	Dam/Canal Failure	15	Medium
6	Drought	9	Low
7	Wildfire	0	Low
8	Volcano	0	Low

8.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- The ACHD Adams Yard and Headquarters are both in close proximity, although out of the floodplain, to the Boise River. A significant flood event (greater than the 100 year event) or a dam inundation event could compromise these facilities.
- Both of ACHD’s maintenance facilities are south of the Boise River. Without substantial prior notice, ACHD would not be able to stage equipment and vehicles accordingly.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

8.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 8-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
ACHD-1—Pintail/Drake/Widgeon Flooding <i>Comment: Ongoing capability. Ongoing flooding problem for 10+ years. Vector truck must pump during routine storms. Storm drain under capacity, two 18” pipes converge and leave as one 18”. ACHD is initiating topographic surveys to look at solutions.</i>			•	ACHD-5
ACHD-2—Meridian Culvert Replacements <i>Comment: Ongoing capability. Still needing replacement: Nine Mile Creek at: E. Watertower Lane, E. Franklin Road, W. Ustick Road. Ten Mile Creek at: Locust Grove Road. Eight Mile Creek at: Overland Road. Five Mile Creek at: S. Topaz Avenue, S. Rackham Way, S. Eagle Road, S. Wells Street.</i>			•	ACHD-6

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
ACHD-3 —Snowflake and Crocus Pipe Realignment <i>Comment: No progress. Need to realign storm drain from the back yards to the street and increase the pipe size to reduce restrictions. Ongoing problem for ACHD Drainage Crew. Vactor truck must pump during routine storms.</i>			•	ACHD-7
ACHD-4 —Create a Storm Water Utility <i>Comment: No progress.</i>			•	ACHD-8
ACHD-5 —Remove sediment from all public street storm water ponds <i>Comment: Ongoing capability for approximately 1,324 ponds.</i>			•	ACHD-9
ACHD-6 —Support county-wide initiatives identified in Volume 1. <i>Comment: Ongoing capability.</i>			•	ACHD-2
ACHD-7 —Continue to support the implementation, monitoring, maintenance, and updating of the Plan as defined in Volume 1. <i>Comment: Ongoing capability.</i>			•	ACHD-3
ACHD-8 —Survey Boise River bridge structures and compare to 100 year flood water surface elevation. <i>Comment: No progress.</i>			•	ACHD-10
ACHD-9 —Eckert Road Bridges #2147 and #2148 replacement over the Boise River. <i>Comment: Ongoing capability.</i>			•	ACHD-11
ACHD-10 —Fairview Avenue Bridges #2196 and #2197 replacement over the Boise River. <i>Comment: In progress.</i>			•	ACHD-12
ACHD-11 —Linder Road Bridges #1078, #2035, and #2036 replacement over the Boise River. <i>Comment: No progress.</i>			•	ACHD-13
ACHD-12 —Relocate ACHD Traffic Management Center to a new location (to be decided) outside of floodplain. <i>Comment: In progress.</i>			•	ACHD-14
ACHD-13 —Gowen Road Bridge #2173 over the New York Canal. <i>Comment: Completed</i>	•			
ACHD-14 —Develop and implement more Green Stormwater Infrastructure standards to stabilize slopes and drainage facilities and prevent erosion. <i>Comment: Ongoing capability.</i>			•	ACHD-15
Actions added and completed during the previous plan maintenance period				
ACHD-15 —Capitol Boulevard Bridge #2202 Scour Repair - Post 2017 Flood Add Rip Rap against 2 bridge piers <i>Comment: Completed</i>	•			
ACHD-16 —Fairview Avenue Bridge #2197 Scour Repair- Post 2017 Flood Add Rip Rap against 2 bridge piers <i>Comment: Completed</i>	•			
ACHD-17 —East Park Center Bridge #2208 Scour Repair - Post 2017 Flood Add Rip Rap against easterly riverbank <i>Comment: Completed</i>	•			
ACHD-18 —Linder Rd Bridge #2036 over North Channel of Boise River: Scour Repair Add Rip Rap around pier #3 <i>Comment: Completed</i>	•			

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
ACHD-19 —Swan Falls Bridge #2094 over Indian Creek: Scour Repair Add Rip Rap around all piers <i>Comment: Completed</i>	•			
ACHD-20 —Americana Blvd Bridge #2200 over the Boise River: Scour Repair Add Rip Rap around pier #1 <i>Comment: Completed</i>	•			
ACHD-21 —Star Road Bridge #2030 over the Boise River: Scour Repair Add Rip Rap around piers #2 and #3, and south abutment. <i>Comment: Completed</i>	•			

8.8 HAZARD MITIGATION ACTION PLAN

Table 8-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 8-12 identifies the priority for each action. Table 8-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 8-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action ACHD-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. <i>Hazards Mitigated:</i> Flood, Severe Weather						
Existing	1, 2, 3, 9, 10	ACHD		High	HMGP, BRIC, FMA	Short-term
Action ACHD-2— Support county-wide initiatives identified in Volume 1. <i>Hazards Mitigated:</i> All hazards						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	ACHD		Low	ACHD Funds, Staff Time	Short Term
Action ACHD-3—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. <i>Hazards Mitigated:</i> All hazards						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	ACHD		Low	ACHD Funds, Staff Time	Short Term
Action ACHD-4— Prevent Pintail/Drake/Widgeon flooding by tree removal or annual root pruning to clear roots growing into the lines. <i>Hazards Mitigated:</i> Flood, Severe Weather						
Existing	2, 3, 9	ACHD	Drainage District 4	Low	ACHD Funds	Short-term
Action ACHD-5— Partner with the City of Meridian to facilitate the replacement of roadway culverts to include design and construction of crossings on Fivemile, Ninemile, Eightmile and Tenmile Creeks. (Coordinates with City of Meridian Action M-14) <i>Hazards Mitigated:</i> Flood, Severe Weather						
Existing	1, 2, 3, 4, 9, 10	ACHD	City of Meridian	High	ACHD Funds, City of Meridian Funds, HMGP, BRIC, FMA	Long-term
Action ACHD-6— Snowflake and Crocus Pipe Realignment <i>Hazards Mitigated:</i> Flood, Severe Weather						
Existing	2, 3, 9	ACHD		Low	ACHD Funds	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action ACHD-7— Create a Storm Water Utility						
<u>Hazards Mitigated:</u> Flood, Severe Weather, Drought						
New & Existing	1, 2, 3, 4, 5, 6, 9, 10	ACHD	Boise, Meridian, Star, Eagle, Garden City, Kuna, Ada County, and Drainage Districts	High	ACHD Funds, City and County Funds, HMGP, BRIC, FMA	Long-term
Action ACHD-8— Remove sediment from all public street storm water ponds						
<u>Hazards Mitigated:</u> Flood, Severe Weather						
New & Existing	1, 2, 3, 9, 10	ACHD		Medium	ACHD Funds	Short-term
Action ACHD-9— Survey Boise River bridge structures and compare to 100 year flood water surface elevation.						
<u>Hazards Mitigated:</u> Flood, Severe Weather, Dam/Canal Failure						
Existing	2, 3, 10	ACHD		Low	ACHD Funds	Short-term
Action ACHD-10— Eckert Road Bridges #2147 and #2148 replacement over the Boise River.						
<u>Hazards Mitigated:</u> Flood, Severe Weather, Dam/Canal Failure						
Existing	1, 2, 3, 10	ACHD		Medium	ACHD Funds, HMGP, BRIC, FMA	Long-term
Action ACHD-11— Fairview Avenue Bridges #2196 and #2197 replacement over the Boise River.						
<u>Hazards Mitigated:</u> Flood, Severe Weather, Dam/Canal Failure						
Existing	1, 2, 3, 10	ACHD		Medium	ACHD Funds, HMGP, BRIC, FMA	Long-term
Action ACHD-12— Linder Road Bridges #1078, #2035, and #2036 replacement over the Boise River.						
<u>Hazards Mitigated:</u> Flood, Severe Weather, Dam/Canal Failure						
Existing	1, 2, 3, 10	ACHD		Medium	ACHD Funds, HMGP, BRIC, FMA	Long-term
Action ACHD-13— Relocate ACHD Traffic Management Center to a new location (to be decided) outside of floodplain.						
<u>Hazards Mitigated:</u> Flood, Severe Weather, Dam/Canal Failure						
New & Existing	1, 2, 3, 10	ACHD		Medium	ACHD Funds	Short-term
Action ACHD-14— Develop and implement more Green Stormwater Infrastructure standards to stabilize slopes and drainage facilities and prevent erosion.						
<u>Hazards Mitigated:</u> Flood, Landslide, Dam/Canal Failure						
New & Existing	1, 2, 3, 7, 8, 10	ACHD		Low	ACHD Funds	Long-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 8-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	5	High	High	Yes	Yes	No	Medium	High
2	10	Low	Low	Yes	No	Yes	High	Low
3	10	High	Medium	Yes	Yes	No	Medium	High
4	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
5	6	High	High	Yes	Yes	No	Low	High

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
6	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
7	8	Low	High	No	Yes	No	Low	Medium
8	5	High	Medium	Yes	No	No	High	Low
9	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
10	4	High	Medium	Yes	Yes	No	Low	High
11	4	High	Medium	Yes	Yes	No	Low	High
12	4	High	High	Yes	Yes	No	Low	High
13	4	High	Low	Yes	Yes	Yes	Medium	High
14	6	Low	Low	Yes	No	Yes	High	Medium

a. See the introduction to this volume for explanation of priorities.

Table 8-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Flood	ACHD-14	ACHD-1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	ACHD-2	ACHD-1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14		ACHD-5, 10, 11, 12, 13	ACHD-1, 5, 9	ACHD-2, 3, 7, 9, 14
Earthquake			ACHD-2					ACHD-2, 3
Severe Weather		ACHD-1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	ACHD-2	ACHD-1, 4, 5, 6, 7, 8, 9, 10, 11, 12		ACHD-5, 10, 11, 12, 13	ACHD-1, 5, 9	ACHD-2, 3, 7, 9
Medium-Risk Hazards								
Landslide	ACHD-14	ACHD-14	ACHD-2	ACHD-14				ACHD-2, 3
Dam/Canal Failure	ACHD-14	ACHD-9, 10, 11, 12, 13, 14	ACHD-2	ACHD-9, 10, 11, 12		ACHD-10, 11, 12, 13	ACHD-1, 5, 9, 10, 11, 12	ACHD-2, 3, 9
Low-Risk Hazards								
Drought		ACHD-7	ACHD-2	ACHD-7				ACHD-2, 3
Wildfire			ACHD-2					ACHD-2, 3
Volcano			ACHD-2					ACHD-2, 3

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

8.9 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **ACHD Integrated Five Year Work Plan**—The work plan was used in the capability assessment and action plan development.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

9. EAGLE FIRE PROTECTION DISTRICT

9.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Tyler Lewis, Fire Chief
1119 E. State St. Suite 240
Eagle, Idaho 83616
Telephone: 208-939-6463
e-mail Address: tlewis@eaglefire.org

Alternate Point of Contact

Theron Hudson, Deputy Chief
1119 E. State St. Suite 240
Eagle, Idaho 83616
Telephone: 208-939-6463
e-mail Address: thudson@eaglefire.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 9-1.

Table 9-1. Local Hazard Mitigation Planning Team Members

Name	Title
Tyler Lewis	Fire Chief
Jamie Vincent	Deputy Chief / Logistics
Scott Buck	Deputy Chief/Fire Marshal
Theron Hudson	Deputy Chief Operations

9.2 JURISDICTION PROFILE

9.2.1 Overview

Eagle Fire Protection District (EFD) provides fire suppression, EMS, hazardous materials mitigation, and rescue services. The District is a mix of urban, rural, interface and wildland areas. The department employs 50 Career personnel who respond to approximately 1500 + calls for service per year. The Eagle Fire Protection District is located in the North East corner of Ada County , South East corner of Gem County and the South West Corner of Boise County. The District provides service to the City of Eagle and unincorporated areas of Ada, Boise, and Gem Counties. The District is bordered by Boise to the South and East, Garden City to the South East, and the Star Joint Fire Protection District to the west.

A three-member Board of Commissioners governs this District and will assume the responsibility for the adoption and implementation of this plan.

The District participates in the Public Protection Class Rating System and currently has a rating of #3.

9.2.2 Service Area

The district serves a population of 35,000 as of 2020. Its service area covers an area of approximately 92 square miles which has a total value of \$9,478,723,925.00.

9.2.3 Assets

Table 9-2 summarizes the assets of the District and their value.

Asset	Value
Property	
8.25 acres of land	\$2,816,000.00
Equipment	
3 Type 1 Engines	\$1,750,000.00
1 85' Quint Platform	\$ 900,000.00
1 Heavy Rescue	\$ 760,000.00
1 Water Tender	\$ 350,000.00
4 Type 6 Engines	\$ 360,000.00
8 Command Vehicles	\$ 400,000.00
1 Water Rescue Unit	\$ 100,000.00
1 Dozer D6T with Trailer	\$ 370,000.00
Total:	\$4,990,000.00
Critical Facilities	
EFD Station # 1	\$2,500,000.00
EFD Station # 2	\$ 1,500,000.00
EFD Station # 3	\$1,500,000.00
EFD Admin.	\$1,000,000.00
Total:	\$6,500,000.00

9.3 CURRENT TRENDS

The Eagle Fire Protection District has experienced an average 4.9% annual growth over the last five years. With a 65.1% growth rate since the 2010 census. The District’s call volume has averaged 1,500 calls per year during this same time period. The District anticipates an increase in new home construction starts in the future. However, we predict calls for service will increase reaching approximately 3,000 per year by 2021. From Jan. 1, 2021 to July 20, 2021 the district has had 1,582 calls for service and anticipates reaching 3000 calls for service by year’s end.

9.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 9-3.
- An assessment of fiscal capabilities is presented in Table 9-4.
- An assessment of administrative and technical capabilities is presented in Table 9-5.
- An assessment of education and outreach capabilities is presented in Table 9-6.
- Classifications under various community mitigation programs are presented in Table 9-7.

Table 9-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Ada County Flood Response Plan	December 2018	N/A
Ada County Wildfire Response Plan	August 2018	N/A
2018 International Fire Code	January 2021	Enforce the 2018 as Adopted and amended by the State of Idaho

Table 9-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	No

Table 9-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	No
Engineers or professionals trained in building or infrastructure construction practices	No
Planners or engineers with an understanding of natural hazards	No
Staff with training in benefit/cost analysis	No
Surveyors	No
Personnel skilled or trained in GIS applications	No
Scientist familiar with natural hazards in local area	No
Emergency manager	No
Grant writers	No
Other	No

Table 9-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	No
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Links on website to Firewise, National Fire Protection Association, Ada Fire Adapted Communities	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> We use Facebook and Twitter; these sites are linked back to our web page.	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	No
Do you have any other programs in place that could be used to communicate hazard-related information?	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red and/ISAWS- Residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 9-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS#	Yes	028591592	February 2021
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Public Protection	Yes	3/8	10/6/2016
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

9.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

9.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Ada County Wildfire Response Plan**— To provide for the life safety of for responders and the populace. Minimize damage to valued resources and the environment from the adverse effects of Wildfire. Develop community awareness and understanding of the wildfire hazard.
- **Ada County Flood Response Plan**— To prevent injury and loss of life due to flooding and flood related causes. Develop Community awareness and understanding of the flood hazard.

9.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- All future updates to plans and programs as identified in the “Existing Integration” section above may reference hazard mapping and data in this hazard mitigation plan.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

9.6 RISK ASSESSMENT

9.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 9-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 9-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Wildfire	NA	10/06/2021	\$30,000.00
Wildfire	NA	7/30/2020	\$30,000.00
Pandemic	DR-4534	1/20/2020	\$1,133,757.74
Flooding	DR-4342	3/29-6/15/2017	Countywide: \$4,493,792
Record Snow Fall	NA	2/9/2017	\$ 10,000.00
Wildland Fire	N/A	5/2/2015	Fire southeast of Avimor above the WWTP
Flood	N/A	2/14/2014	Flooded areas around homes and threatened Beacon Light Road
Wildland Fire	N/A	7/20/2014	North of Spring Valley Ranch threatened wildlife habitat, multiple agency responded
Severe Weather	N/A	9/5/2013	Severe weather storm hit the area. Cause a tree to blow down on an occupied vehicle and two homes being struck by lightning depleting resources
Wildland Fire	N/A	9/5/2013	Wild fire threatening the Jasmine Mine.
Wildland Fire	N/A	8/15/2013	Fire on Spring Creek Road threatened numerous home and power transmission lines, multiple agencies responded
Wildland Fire	N/A	7/16/2013	Numerous homes threatened by wind driven fire, was resource intensive, depleted resources. Multiple agencies responded
Wildland Fire	N/A	7/4/2013	Foothills North of Eagle threatened numerous homes, multiple agencies responded.
Wildland Fire	N/A	8/24/2012	Fire West of Willow Creek road threatening several homes.
Wildland Fire	N/A	7/22/2012	Fire East of Willow Creek road threatening power lines.
Flood	N/A	5/4/2012	Flood threatened numerous home Eagle Island and west of Linder Rd. multiple agency response or several days

9.6.2 Hazard Risk Ranking

Table 9-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	54	High
2	Wildfire	36	High
3	Extreme Weather	33	High
4	Earthquake	32	High
5	Dam Failure	18	Medium
6	Landslide	12	Low
7	Drought	6	Low
8	Volcano	6	Low

9.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. No additional jurisdiction-specific issues were identified.

9.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 9-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action EFD-01—Continue to provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via web pages, signage and outreach.</p> <p><i>Comment:</i> Ongoing. The fire department continually uses Twitter, Facebook, and our web page to post educational messages regarding all hazards.</p>			•	EFD-4
<p>Action EFD-02—Reduce the determined vegetation which can fuel a rapid spreading wildland fire through the means of mechanical mowing of invasive grass and brush in the wildland urban interface</p> <p><i>Comment:</i> Ongoing. Reduction of fuels within Avimor PC. The planting of the Forage Kochia was completed site being monitored for new plant growth.</p>			•	EFD-5
<p>Action EFD-03—Partnering with adjoining jurisdictions in purchasing specialized equipment to reduce and eliminate invasive grasses through the means of applying herbicides and replanting of fire resistant native plant species in the wildland urban interface.</p> <p><i>Comment:</i> Purchased the broadcast spreader and drag chains for replanting grasses in 2018</p>	✓			

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>Action EFD-04—Partnering with adjoining jurisdictions to rehabilitate areas impacted by wildfire for wildlife while sustaining access to recreational trails and to prevent erosion</p> <p><i>Comment: Ongoing. Continue to work with partner agency's on this project.</i></p>			•	EFD-6
<p>Action EFD-05—Partner with Federal agencies to install electronic flow monitoring stations on the North Channel of the Boise River Eagle Rd. Bridge and Dry Creek Dry Creek drainage at Eagle Rd. Bridge.</p> <p><i>Comment: Remove. USGS can provided rapid deployment gauges.</i></p>		•		
<p>Action EFD-06—Host a community wide open house to increase public awareness of all hazards within the Eagle Fire Protection district and response capabilities of the jurisdiction.</p> <p><i>Comment: Ongoing. Annually every October the Eagle Fire Department holds an open house. This is done to increase the public's awareness of the hazards in the fire district and what our response capabilities are. Last October we had approximately 600 + people attend our open house.</i></p>			•	EFD-7
<p>Action EFD-07—Partner with appropriate local authorities to establish right-of-way and construct a roadway that will allow access on to State Hwy 44 from Plaza Dr. to enhance the response capabilities for the Eagle Fire Dept. and Ada County Sheriff's Dept.</p> <p><i>Comment: Completed in 2021</i></p>	✓			
<p>Action EFD-08—Support County wide initiatives identified in Volume 1</p> <p><i>Comment: Ongoing.</i></p>			•	EFD-3
<p>Action EFD-09—Continue to support the implementation, monitoring, maintenance, and updating of the plan, as defined in Volume 1</p> <p><i>Comment: Ongoing.</i></p>			•	EFD-2
<p>Action EFD-10—Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation projects.</p> <p><i>Comment: Ongoing.</i></p>			•	EFD-8

9.8 HAZARD MITIGATION ACTION PLAN

Table 9-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 9-12 identifies the priority for each action. Table 9-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 9-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action EFD-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<u>Hazards Mitigated:</u> Flood, Wildfire, Earthquake, Extreme Weather, Dam/Canal Failure, Landslide						
Existing	1, 3, 10	Eagle Fire		High	HMGP, BRIC, FMA	Short-term
Action EFD-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<u>Hazards Mitigated:</u> All hazards						
New & Existing	All	Eagle Fire	EMCR	Low	Staff Time, General Funds	Short-term
Action EFD-3 — Support County-wide initiatives identified in Volume 1						
<u>Hazards Mitigated:</u> All hazards						
New & Existing	All	Eagle Fire	EMCR	Low	Staff Time, General Funds	Short-term
Action EFD-4 —Continue to provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via web pages, signage and outreach.						
<u>Hazards Mitigated:</u> Wildfire						
New & Existing	8, 9	Eagle Fire		Low	District Funds	Short-term
Action EFD-5 —Reduce the determined vegetation which can fuel a rapid spreading wildland fire through the means of mechanical mowing of invasive grass and brush in the wildland urban interface						
<u>Hazards Mitigated:</u> Wildfire						
New & Existing	2, 8, 9	Eagle Fire		Medium	BRIC, District Funds	Ongoing
Action EFD-6 —Partnering with adjoining jurisdictions to rehabilitate areas impacted by wildfire for wildlife while sustaining access to recreational trails and to prevent erosion.						
<u>Hazards Mitigated:</u> Wildfire, Landslide						
New & Existing	2, 8, 9	Eagle Fire	RCD	Medium	BRIC, District Funds	Long-term
Action EFD-7 —Host a community wide open house to increase public awareness of all hazards within the Eagle Fire Protection district and response capabilities of the jurisdiction.						
<u>Hazards Mitigated:</u> Wildfire, Flood, Earthquake, Dam/Canal Failure, Severe Weather, Landslide, Drought, Volcano						
New & Existing	All	Eagle Fire	EMCR	Low	District Funds	Short-term
Action EFD-8 — Develop a Joint Emergency Operation Plan with Eagle City, Eagle Sewer District, and Eagle Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Eagle will lead this all-discipline action, but Eagle Sewer District and Eagle Fire District will aid in planning for all hazards. (Coordinates with City of Eagle Action E- and Eagle Sewer District Action ESD-7)						
<u>Hazards Mitigated:</u> All hazards						
New & Existing	All	City of Eagle	Eagle Sewer District, Eagle Fire District	Medium	City Funds, District Funds, HMGP	Short-term
Action EFD-9 — Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation projects.						
<u>Hazards Mitigated:</u> Wildfire						
New & Existing	1, 6, 9, 10	Eagle Fire	Boise Fire, Private Organizations, Federal, ACCEM	Low	BRIC, District Funds, Private	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action EFD-10 — In partnership with Eagle Fire Protection District, Middleton Rural Fire District, and Star Fire Protection District, continue to support wildfire mitigation projects such as those sponsored by the Healthy Hills Initiative within the Eagle city limits or urban growth area. (Coordinates with Star Joint Fire Protection District Action SFD-6, City of Eagle Action E-7)						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	2, 4, 5, 6, 7, 8, 9	City of Eagle	Eagle Fire Protection, Middleton Rural Fire District, Star Fire Protection District	Low	Staff Time HMGP, BRIC	Ongoing
Action EFD-11 — Establish Strategic Planning process for foothills. (Coordinates with City of Boise Action B-23, North Ada County Fire & Rescue District Action NACFR-12)						
<i>Hazards Mitigated:</i> Wildfire						
Existing	2, 3, 4, 5, 6, 9	Boise Fire Department	Eagle Fire Protection, NACFR	Medium	Rural Fire Assistance Grant, National Fire Plan	Long-term/Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 9-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	10	Low	Low	Yes	No	Yes	High	Low
3	10	High	Medium	Yes	Yes	No	Medium	High
4	2	Medium	Low	Yes	Yes	Yes	High	Low
5	3	High	Medium	Yes	Yes	No	Medium	Medium
6	3	Medium	Medium	Yes	Yes	No	Low	Low
7	10	High	Low	Yes	Yes	Yes	High	Low
8	10	Low	Low	Yes	Yes	Yes	High	Medium
9	4	High	Low	Yes	Yes	No	High	Low
10	7	Medium	Low	Yes	Yes	No	Medium	Medium
11	6	Medium	Medium	Yes	Yes	Yes	High	High

a. See the introduction to this volume for explanation of priorities.

Table 9-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Flood	EFD-2, 3	EFD-1, 3	EFD-2, 7	EFD-3, 10				EFD-2, 3, 8
Wildfire	EFD-2, 3, 11	EFD-1, 3, 6	EFD- 4, 7, 9	EFD 3, 5, 6, 11	EFD-3, 7			EFD-2, 3, 6, 8, 9, 10, 11
Extreme Weather	EFD-2, 3	EFD-1, 3	EFD-7		EFD-3			EFD-2, 3, 8
Earthquake	EFD-2, 3	EFD-1, 3	EFD-7					EFD-2, 3, 8
Medium-Risk Hazards								
Dam Failure	EFD-2, 3	EFD-1, 3	EFD-7					EFD-2, 3, 8
Low-Risk Hazards								
Landslide	EFD-2	EFD-1	EFD-7	EFD 6				EFD-2, 3, 6, 8
Drought	EFD-2		EFD-7					EFD-2, 3, 8
Volcano	EFD-2		EFD-7					EFD-2, 3, 8

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

9.9 PUBLIC OUTREACH

Table 9-14 lists public outreach activities for this jurisdiction.

Table 9-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Posted outreach material to Facebook	8/24/2021	3,722
Posted outreach material to Twitter	8/24/2021	2,476
Posted link to Ada County Multi-Hazard Mitigation Plan: Public Involvement on EFD Website	8/24/2021	N/A

9.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed for this annex.

- **Idaho Code 41-253 Adoption of the International Fire Code, IDAPA 18.01.50**—Adoption of the International Fire Code. The Idaho Surveying & Rating Bureau Protection Class Evaluation. Reviewed during the capability assessment.
- **Ada County Wildfire Response Plan**—Reviewed to assess capability and integration.
- **Ada County Flood Response Plan**—Reviewed to assess capability and integration.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

10. EAGLE SEWER DISTRICT

10.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Neil Jenkins, General Manager
44 N. Palmetto Ave
Eagle, ID 83616
Telephone: 208-939-0132
e-mail Address: njenkins@eaglesewer.org

Alternate Point of Contact

Chris Kossow, Operations Manager
100 S. Urban Gate Ave
Eagle, ID 83616
Telephone: 208-939-0781
e-mail Address: ckossow@eaglesewer.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 10-1.

Table 10-1. Local Hazard Mitigation Planning Team Members

Name	Title
Erv Ballou	Board Chairman
Terry Loftus	Board Member
Neil Jenkins	General Manager
Laura Markham	Administrative Manager
Chris Kossow	Operations Manager

10.2 JURISDICTION PROFILE

10.2.1 Overview

The Eagle Sewer District (District) receives its operating authority from Idaho State Code, Title 42, Chapter 32, Sections 43-3201 to 42-3238. The District was created on December 30, 1963 in response to a need for central sewer service and currently provides service for an area that generally coincides with the City of Eagle’s impact area. A five-member elected Board of Directors governs the District. The District’s current service area is bounded by Highway 16 on the West, the foothills (Spring Valley development) nearly to the Gem County line north of Homer Road on the North, Highway 26 on the South and Highway 55 and Old Horseshoe Bend Road on the East. This service area essentially mirrors the City of Eagle’s impact area.

Eagle Sewer District currently treats wastewater in lagoons and then pumps the treated effluent to the City of Boise’s West Boise Water Renewal Facility for further treatment and discharge to the Boise River. For this treatment, the Eagle Sewer District now purchases capacity in the West Boise Water Renewal Facility and pays monthly charges that are based on the amount of flow, organic load, solids load and ammonia load.

Sewer lift stations serve as a central point of collection for gravity sewer lines. The raw sewage is conveyed by gravity to these collection points and the lift stations pressurize and lift the sewage either into other gravity collection lines or push the flow directly to the wastewater treatment plant. The District currently owns thirteen lift stations located on Stillwater, Crestpoint, Eastside, Mace Lift, Lakemoor, Creighton Woods, Ashbury, Fred Meyer, Old Valley, Palmer Lift, Moon Valley, Estrada Village, and Element Skye. Additional lift stations are in the process of planning and design.

The Eagle Sewer District operates almost exclusively on user fees. A small amount is also levied on property taxes to pay for the District's operation and maintenance costs and the property and administrative liability insurance.

The Eagle Sewer District Board assumes responsibility for the adoption of this plan; Eagle Sewer District staff will oversee its implementation.

10.2.2 Service Area

The district serves a population of 27,500 as of 2021. Its service area covers an area of 44 square miles, which has a total market value (including occupancy rolls) of \$6,428,579,713.

10.2.3 Assets

Table 10-2 summarizes the assets of the District and their value.

Asset	Value
Property	
103.25 acres of land	\$8,500,000
Equipment	
Approximately 189 miles of pipe throughout the District	\$99,792,000
Generators for critical lift stations (12)	\$600,000
Emergency Trailer- Mounted Generator	\$50,000
Effluent Transmission Line	\$11,000,000
Emergency Trailer-Mounted Pump	\$75,000
Operations and Maintenance Equipment and Vehicles	\$900,000
Total:	\$120,917,000
Critical Facilities	
District Administration Office	\$900,000
Wastewater Treatment Facility	\$15,000,000
Blower Building	\$2,000,000
Operations Building	\$2,000,000
Stillwater Lift Station	\$500,000
Eastside Lift Station	\$350,000
Fred Meyer Lift Station	\$500,000
Mace Lift Station	\$2,000,000
Old Valley Lift Station	\$7,000,000
Ashbury Lift Station	\$350,000
Lakemoor Lift Station	\$500,000

Asset	Value
Palmer Lift Station	\$5,000,000
Crestpoint Lift Station	\$550,000
Creighton Woods Lift Station	\$550,000
Moon Valley Lift Station	\$500,000
Estrada Village Lift Station	\$500,000
Element Skye Lift Station	\$575,000
Total:	\$38,775,000

10.3 CURRENT TRENDS

Population trends used to estimate future population of the Eagle Sewer District service area can be approximated by utilizing existing population studies completed for the City of Eagle. From 1990 to 2007, the City of Eagle experienced a six-fold increase in population, but from 2008 to 2013 the local residential housing market experienced a significant downturn. In recent years, the housing market has increased significantly and the District has noted an increase in the number of new customers. According to COMPASS, the population of the City of Eagle as of April 2021 was 34,470. Since 2011, the population has grown at an average annual rate of 4.2 percent.

10.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 10-3.
- An assessment of fiscal capabilities is presented in Table 10-4.
- An assessment of administrative and technical capabilities is presented in Table 10-5.
- An assessment of education and outreach capabilities is presented in Table 10-6.
- Classifications under various community mitigation programs are presented in Table 10-7.

Table 10-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Clean Water Act	1972	
Endangered Species Act	1973	
Idaho Department of Environmental Quality	N/A	
U.S. Environmental Protection Agency	N/A	
Idaho Administrative Code	N/A	
Idaho Administrative Procedure Act	N/A	
Wastewater Treatment and Facilities Plan	2016	A facilities plan update is planned for 2023.
Collection System Master Plan	2016	A master plan update is planned for 2023.
Capital Improvement Program	Updated annually	
Idaho Statewide Implementation Plan	N/A	
All other applicable laws, ordinances, codes and policies enforced by federal, state and local authorities with a sphere of influence over the District's service area.	N/A	

Table 10-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify:</i> Sewer fees	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other <i>If yes, specify:</i> LID, CID	Yes

Table 10-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Contract engineer	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Contract engineer	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Contract engineer	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Contract engineer	Yes
Surveyors <i>If Yes, Department /Position:</i> Contract surveyors	Yes

Staff/Personnel Resource	Available?
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Eagle Sewer Staff	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Contract scientist	Yes
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management & Community Resilience (EMCR)	Yes
Grant writers <i>If Yes, Department /Position:</i> Ability to contract for service	Yes

Table 10-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i>	No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i>	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Eagle Sewer District Board	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i>	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 10-7. Community Classifications

	Participating	Classification	Date Classified
FIPS Code	N/A	N/A	N/A
DUNS#	Yes	036695878	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	N/A	N/A	N/A
Storm Ready	Yes	Participant	N/A
Firewise	No	No	N/A

10.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

10.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City of Eagle Comprehensive Plan**—The 2017 Eagle Comprehensive Plan includes mitigation related policies as they relate to the protection of human life and property from flood events.
- **Ada County Wildfire Response Plan**—The Wildfire Response Plan for Ada County includes procedures that will mitigate risk to human life and property from a wildfire.

10.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Eagle City, Eagle Sewer District, and Eagle Fire District Joint Emergency Operation Plan (EOP)**—This joint plan has not yet been developed but will consider the natural and human-caused hazards in this HMP when developing strategies for emergency operations.
- **Eagle Sewer District Continuity of Operation Plan (COOP)**—This plan has not yet been developed but will consider the natural and human-caused hazards in this HMP when developing strategies for the COOP.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

10.6 RISK ASSESSMENT

10.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 10-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

10.6.2 Hazard Risk Ranking

Table 10-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings. The risk ranking score corresponds to that of the City of Eagle.

Table 10-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	January 20, 2020 and continuing	\$25,000+ Lost productivity from employees out sick or getting tested.
Flooding	DR-4342	March 29 – June 15, 2017	\$50,000 Groundwater dewatering during construction project.
Wildfire (foothills)	N/A	7/28/2010	-
Flooding	N/A	6/2-4/1998	-
Flooding	N/A	5/15-28/1998	-
Flooding	N/A	9/11/1997	-
Flooding	DR-1154	1/11/1997	-
Severe Weather	N/A	12/1/1994	-
Flash Flooding	N/A	6/25/1992	-
Drought	N/A	3/1/1992	-
Flooding	N/A	1/12/1991	-
Severe Weather	N/A	2/4/1989	-
Severe Weather	N/A	12/19/1988	-
Drought	N/A	10/31/1988	-
Flooding	N/A	2/1986	-
Flooding	N/A	6/10/1983	-

Table 10-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Flood	24	Medium
3	Wildfire	22	Medium
4	Dam/Canal Failure	18	Medium
5	Earthquake	16	Medium
6	Landslide	12	Low
7	Drought	9	Low
8	Volcano	6	Low

10.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Lagoon berm integrity may be compromised in the event of a flood. This could include a pit capture event in the borrow pond(s) adjacent to the lagoons.
- Access to Mace Lift Station and Old Valley Lift Station may be limited in the event of a flood
- Nearly half of the service area is served by a pipeline 0.5 miles long located in the floodway near the WWTP. Another 0.5 miles of the same pipeline is in the floodplain. This line is especially vulnerable to being washed away or overwhelmed in a flooding event.

- Severe weather/climate change – high temperatures affect blower building equipment electronics, specifically in the blower equipment that was designed based on building codes at the time of construction. Recent weather has been hotter than design criteria which puts these systems at risk.
- Portions of the collection system are at elevations and locations close to the Boise River. In the 100-year flood, or higher, parts of the system are submerged, and floodwaters enter the collection system overwhelming the pump stations and compromising the critical pumping and treatment facilities. Severe weather/drought/climate change - brownouts/blackouts might cause interruption of electricity to the WWTP stopping treatment and resulting in uncontrolled sewer overflows to the Boise River and on streets.
- Lift stations, WWTP, manholes, pipelines, etc. are vulnerable to earthquakes that could break or separate pipelines, interrupt power supplies, and damage building housing process equipment.
- Sewer infrastructure on the bench and in Spring Valley is vulnerable to landslides based on its location in and near hillsides and slopes.
- The Spring Valley WWTP is vulnerable to wildfire because of its location in the foothills. Even if the WWTP itself was not impacted, smoke and access could inhibit operation of this critical infrastructure. Wildfire could also reduce lift station function.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

10.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 10-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 10-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>ESD-1—Lagoon Berm Evaluation and Stabilization: High flow velocities during flooding events could potentially cause erosion at the toe of the lagoon berms and, although unlikely, possibly cause structural failure. Perform hydraulic modeling of the river channel and estimate potential for erosion of the lagoon berm. If deemed necessary, the placement of rip-rap and/or other measures would be pursued to reduce lagoon dike erosion.</p> <p><i>Comment: Project completed in 2021 to armor the lagoons and place rip-rap to direct river away from the lagoons.</i></p>	✓			
<p>ESD-2—Raise Portions of the Wastewater Treatment Plant, Mace Lift Station, and Old Valley Lift Station access roads: Portions of the road leading to these facilities are below the 100-year and 500-year flood elevations. To ensure that District staff can access wastewater treatment and operation facilities during a flooding event, low sections of access roads should be raised.</p> <p><i>Comment: In progress. The WWTP road was raised in 2021. The Mace and Old Valley lift station access roads still need to be raised.</i></p>			A.	ESD-5
<p>ESD-3—Control Building and Outbuilding Berm Option: To protect the Operations and several outbuilding at the wastewater treatment site against possible flooding, a small berm might be constructed around the perimeter of this area.</p> <p><i>Comment: Project completed in 2021.</i></p>	✓			

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>ESD-4—Develop a Joint Emergency Operation Plan with Eagle City and Eagle Fire District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Eagle will lead this all-discipline action, but Eagle Sewer District will aid in planning for all hazards.</p> <p>Comment: <i>No progress. A plan was developed several years ago, however this plan has not been updated since original creation.</i></p>			B.	ESD-7
<p>ESD-5—Develop a Continuity of Operation Plan: This plan will provide specific policies and procedures that will be carried out in the event of an emergency, including localized acts of nature, accidents, and technological or attack-related emergencies. The plan will address how the District will continue to perform essential functions in the event of compromised facilities or leadership, and how the District will return to normal operations.</p> <p>Comment: <i>Ongoing. There is a plan, however it needs updated.</i></p>			C.	ESD-8
<p>ESD-6—Support County-wide Initiatives Identified in Volume 1 of the Multi-Hazard Mitigation Plan</p> <p>Comment: <i>Ongoing. Continued support and communication.</i></p>			D.	ESD-9
<p>ESD-7—Actively Participate in the Plan Maintenance Protocols Outlined in Volume 1 of the Multi-Hazard Mitigation Plan</p> <p>Comment: <i>Ongoing. Continued communication and work with the other agencies.</i></p>			E.	ESD-2

10.8 HAZARD MITIGATION ACTION PLAN

Table 10-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 10-12 identifies the priority for each action. Table 10-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 10-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action ESD-1—Support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in medium-risk hazard areas.</p> <p>Hazards Mitigated: Flood, Severe Weather, Dam/Canal Failure</p>						
Existing	1,3,10	Eagle Sewer District	N/A	High	HMGP, BRIC, FMA	Short-term
<p>Action ESD-2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p>Hazards Mitigated: All Hazards</p>						
New and Existing	All	Eagle Sewer District	Ada County	Low	District Funds, HMGP	Short-term
<p>Action ESD-3—Purchase generators for critical facilities and infrastructure that lack adequate backup power. This may include solar generation capacity and battery systems for pumping and treatment facilities.</p> <p>Hazards Mitigated: Flood, Severe Weather, Wildfire, Dam/Canal Failure, Earthquake</p>						
New and Existing	1,3,10	Eagle Sewer District	N/A	Medium	District Funds, HMGP, BRIC, FMA	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action ESD-4 — Relocate the collection system pipeline that serves nearly half the service area and is located in the floodway/floodplain to outside these hazard zones.						
<i>Hazards Mitigated:</i> Flood, Severe Weather, Dam/Canal Failure						
Existing	1,2,10	Eagle Sewer District	N/A	High	District Funds, HMGP, BRIC, FMA	Short-Term
Action ESD-5 —Raise Portions of the Mace Lift Station and Old valley Lift Station access roads: Portions of the road leading to these facilities are below the 100-year and 500-year flood elevations. To ensure that District staff can access facilities during a flooding event, low sections of access roads should be raised.						
<i>Hazards Mitigated:</i> Flood, Severe Weather, Dam/Canal Failure						
Existing	1, 10	Eagle Sewer District	N/A	Low	District Funds, HMGP, FMA	Short-term
Action ESD-6 —Protect critical electronics in WWTP blowers susceptible to higher than design temperatures by air conditioning the blower room. Also protect lift station pumping system controls by air conditioning control rooms.						
<i>Hazards Mitigated:</i> Severe Weather						
Existing	1,10	Eagle Sewer District	N/A	Low	District Funds, HMGP, BRIC	Short-term
Action ESD-7 — Develop a Joint Emergency Operation Plan with Eagle City, Eagle Sewer District, and Eagle Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Eagle will lead this all-discipline action, but Eagle Sewer District and Eagle Fire District will aid in planning for all hazards. (Coordinates with City of Eagle Action E-9 and Eagle Fire Protection District EFD-8)						
<i>Hazards Mitigated:</i> All Hazards						
New and Existing	All	City of Eagle	Eagle Sewer District, Eagle Fire District	Medium	City Funds, District Funds, HMGP	Short-term
Action ESD-8 —Update the Continuity of Operations Plan: This plan will provide specific policies and procedures that will be carried out in the event of an emergency, including localized acts of nature, accidents, and technological or attack-related emergencies. The plan will address how the District will continue to perform essential functions in the event of compromised facilities or leadership, and how the District will return to normal operations.						
<i>Hazards Mitigated:</i> All Hazards						
New and Existing	All	Eagle Sewer District	N/A	Medium	District Funds, HMGP	Short-term
Action ESD-9 —Support County-wide Initiatives Identified in Volume 1 of the Multi-Hazard Mitigation Plan						
<i>Hazards Mitigated:</i> All Hazards						
New and Existing	All	Eagle Sewer District	N/A	Medium	District Funds, HMGP, BRIC, FMA	Short-term
Action ESD-10 —Convert the borrow pit ponds between the Boise River and the wastewater lagoons into wetlands. This action will reduce the risk of pit capture in a flood or dam failure event. The wetlands will also create habitat for wildlife and native black cottonwood. The removal of the heat-collecting ponds and addition of a wetland will mitigate temperature effects in the river improving habitat for aquatic species.						
<i>Hazards Mitigated:</i> Flood, Dam/Canal Failure, Severe Weather						
New and Existing	1,3,10	Eagle Sewer District	Army Corps, City of Boise	Medium	District Funds, HMGP, FMA	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 10-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
ESD-1	3	High	High	Yes	Yes	No	Medium	High
ESD-2	10	Low	Low	Yes	No	Yes	High	Low
ESD-3	3	High	Medium	Yes	Yes	No	Medium	High
ESD-4	3	Medium	Medium	Yes	Yes	No	Medium	Medium
ESD-5	2	Medium	Medium	Yes	Yes	No	Medium	Medium
ESD-6	2	Medium	Medium	Yes	Yes	No	Medium	Medium
ESD-7	10	Low	Low	Yes	Yes	Yes	High	Medium
ESD-8	10	Low	Low	Yes	Yes	Yes	High	Medium
ESD-9	10	Low	Low	Yes	No	Yes	High	Low
ESD-10	3	Medium	Medium	Yes	Yes	No	Medium	Medium

a. See the introduction to this volume for explanation of priorities.

Table 10-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather		ESD-1, 4, 5, 6	ESD-2	ESD-10	ESD-3	ESD-10	ESD-10	ESD-2, 7, 8, 9
Medium-Risk Hazards								
Flood		ESD-1, 4, 5	ESD-2	ESD-10	ESD-3	ESD-10	ESD-10	ESD-2, 7, 8, 9
Wildfire			ESD-2		ESD-3			ESD-2, 7, 8, 9
Dam/Canal Failure		ESD-1, 4, 5	ESD-2	ESD-10	ESD-3	ESD-10	ESD-10	ESD-2, 7, 8, 9
Earthquake			ESD-2		ESD-3			ESD-2, 7, 8, 9
Low-Risk Hazards								
Landslide			ESD-2					ESD-2, 7, 8, 9
Drought			ESD-2					ESD-2, 7, 8, 9
Volcano			ESD-2					ESD-2, 7, 8, 9

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

10.9 PUBLIC OUTREACH

Table 10-14 lists public outreach activities for this jurisdiction.

Table 10-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Eagle Sewer District Board Meeting	Monthly	Varies
Eagle Sewer District Website and Comment Box	Ongoing	Varies

10.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **Eagle Sewer District Wastewater Treatment and Collection Systems Plan, 2016**—Used in the capabilities assessment and action plan. Describes District assets and critical infrastructure.
- **Eagle Sewer District Annual Audit, 2021**—Used in the capabilities assessment. Provides information on District assets.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

10.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

As the climate in this part of Idaho continues to change with warmer winters and hotter summers, additional planning is necessary to protect critical infrastructure.

11. EAGLE URBAN RENEWAL AGENCY

11.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Ashley Squyres, Administrator
Mailing Address: 104 East Fairview Ave, #239
Meridian, ID 83642
Telephone: 208-830-7786
e-mail: meridiandevelopmentcorp@gmail.com

Alternate Point of Contact

Michael Williams, CFM, Floodplain Administrator/Planner III
660 East Civic Lane
Eagle, Idaho 83616
Telephone: 208-489-8774
e-mail Address: mwilliams@cityofeagle.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 11-1.

Table 11-1. Local Hazard Mitigation Planning Team Members

Name	Title
Ashley Squyres	Administrator
Michael Williams	Floodplain Administrator/Planner III

11.2 JURISDICTION PROFILE

11.2.1 Overview

The Eagle Urban Renewal Agency (EURA) is an independent public redevelopment agency created in 2006 to promote community and economic development. The Eagle Urban Renewal Agency operates under Idaho Code in accordance with Idaho Urban Renewal Law and the Local Economic Development Act. The Agency's purpose is to undertake the rehabilitation, conservation, development or redevelopment of areas identified within the Eagle Urban Renewal Plan.

In Eagle, the Eagle Urban Renewal Agency uses redevelopment to address sites within the district boundaries that have deteriorated, are underutilized or vacant and need assistance to become viable again. To accomplish urban renewal, EURA forms partnerships with private entities and uses tax increment financing (TIF), a tool available only to redevelopment agencies, to breathe new life into those areas. As a result, the entire community benefits from the creation of new businesses, jobs and tax revenues.

The mission of the agency is to promote sustainable economic growth, vitality, and community enhancement through collaboration and community investment, and to encourage revitalization and rehabilitation throughout the urban renewal district. To accomplish its mission, the agency works in close partnership with the Mayor, City Council, and a variety of public entities as well as downtown and neighborhood groups.

The agency has nine commissioners made up of one City Council member and eight at-large citizens.

The Eagle Urban Renewal Agency Board assumes responsibility for the adoption of this plan; the city of Eagle will oversee its implementation.

11.2.2 Service Area

The District service area is all located within the City of Eagle city limits. The district takes in about 31 square miles and serves a population of 34,470.

11.2.3 Assets

The District does not own property, equipment, or critical facilities.

11.3 CURRENT TRENDS

At this time, each of our TIF districts are redeveloping and growing.

11.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 11-2.
- An assessment of fiscal capabilities is presented in Table 11-3.
- An assessment of administrative and technical capabilities is presented in Table 11-4.
- An assessment of education and outreach capabilities is presented in Table 11-5.
- Classifications under various community mitigation programs are presented in Table 11-6.

Table 11-2. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Idaho Urban Renewal Law in Title 50, Chapter 20, Idaho Code		
Local Economic Development Act, Title 50, Chapter 29, Idaho Code		
City of Eagle Comprehensive Plan: Economic Development Chapter	11/15/2017	

Table 11-3. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes, through TIF financing
Authority to Levy Taxes for Specific Purposes	This is what TIF financing is for - urban renewal
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Available, but the board chooses not to bond.
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Other	No
<i>If yes, specify:</i>	

Table 11-4. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> City Engineer available as needed on a contracted basis	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Ashley Squyres, Michael Williams	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Surveyors <i>If Yes, Department /Position:</i> Contracted as needed	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> City GIS available as needed	No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Contracted as needed	No
Emergency manager <i>If Yes, Department /Position:</i>	No
Grant writers <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Other <i>If Yes, Department /Position:</i>	No

Table 11-5. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i>	No

Criterion	Response
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i>	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i>	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i>	No

Table 11-6. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	N/A	N/A	N/A
DUNS#	Yes	024950599	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	N/A	N/A	N/A
Storm Ready	N/A	N/A	N/A
Firewise	N/A	N/A	N/A

11.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

11.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City of Eagle Comprehensive Plan: Economic Development Chapter** —Land planning and land availability analysis in conjunction with hazard mapping in the HMP

11.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **City of Eagle Comprehensive Plan: Economic Development Chapter** —Update land planning and land availability reviews after considering revised hazard mapping in this hazard mitigation plan update.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

11.6 RISK ASSESSMENT

11.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 11-7 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 11-7. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	1/20/2020-present	unknown
Flooding	DR-4342	3/29/2017-06/15/2017	Countywide: \$4,493,792
Rain on Snow Flood	N/A	2012	N/A
Wildfire	N/A	07/28/2010	\$7,000,000
Wildland Fire	N/A	07/11/2010	N/A
Wildland Fire	N/A	08/29/2009	N/A
Severe Storm	N/A	01/02/2009	N/A
Wildland Fire	N/A	09/18/2008	N/A
Wildland Fire	N/A	08/08/2006	N/A
Severe Storm	N/A	07/04/2006	N/A
Flood	N/A	6/2006	\$500,000.00
Flood	N/A	6/2006	\$100,000.00

11.6.2 Hazard Risk Ranking

Table 11-8 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 11-8. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Flood	24	Medium
3	Wildfire	22	Medium
4	Dam/Canal Failure	18	Medium
5	Earthquake	16	Medium
6	Landslide	12	Low
7	Drought	9	Low
8	Volcano	6	Low

11.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Special flood hazard areas exist within the EURA boundaries.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

11.7 HAZARD MITIGATION ACTION PLAN

Table 11-9 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 11-10 identifies the priority for each action. Table 11-11 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 11-9. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action EURA-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide						
Existing	3, 8, 9	EURA	City of Eagle	High	HMGP, BRIC, FMA	Short-term
Action EURA-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Extreme Weather, Flood, Wildfire, Dam/Canal Failure, Earthquake, Landslide, Drought						
New & Existing	All	EURA		Low	Staff Time, General Funds	Short-term
Action EURA-3 — Support county-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought						
Existing	All	EURA		Low	Staff Time, General Funds	Short-term
Action EURA-4 — Integrate Hazard Mitigation Plan hazard mapping into district plan updates, as applicable.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide						
New & Existing	1, 2, 6	EURA		Low	Staff Time, General Funds	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 11-10. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	3	Low	Low	Yes	No	Yes	High	Low
3	10	Low	Low	Yes	No	Yes	High	Low
4	3	Low	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 11-11. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Extreme Weather		EUR A-1	EUR A-2					EUR A-2, 3, 4
Medium-Risk Hazards								
Flood		EUR A-1	EUR A-2					EUR A-2, 3, 4
Wildfire		EUR A-1	EUR A-2					EUR A-2, 3, 4
Dam/Canal Failure		EUR A-1	EUR A-2					EUR A-2, 3, 4
Earthquake		EUR A-1	EUR A-2					EUR A-2, 3, 4
Low-Risk Hazards								
Landslide		EUR A-1	EUR A-2					EUR A-2, 3, 4
Drought			EUR A-2					EUR A-2, 3
Volcano			EUR A-2					EUR A-2, 3

- a. See the introduction to this volume for explanation of mitigation types.
- b. Based on current community capacity, this jurisdiction did not identify a need for expansion of administrative and technical capabilities. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

11.8 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **City of Eagle Comprehensive Plan: Economic Development Chapter**—The chapter was reviewed for plan objectives correlating to hazard mitigation, for the capability assessment, and for identifying opportunities for action plan development.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

12. FLOOD CONTROL DISTRICT #10

12.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Mike Dimmick, District Manager
8941 W. Duck Lake Dr.
Garden City, ID 83714
Telephone: 208-861-2766
e-mail Address: projectmgr@boiseriver.org

Alternate Point of Contact

Ervin Ballou, Assistant Project Manager
433 E. Rene Pl
Eagle, ID 83616
Telephone: 208-412-5104
e-mail Address: ballou.erv45@gmail.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 12-1.

Table 12-1. Local Hazard Mitigation Planning Team Members

Name	Title
Mike Dimmick	District Manager

12.2 JURISDICTION PROFILE

12.2.1 Overview

Boise River Flood Control District No. 10 is responsible for working to minimize flood damage and to protect and promote the health, safety and general welfare (Idaho Code Section 42-3102). The District was organized on October 13, 1970 through an Order by the Director of the State of Idaho, Department of Water Administration (Idaho Department of Water Resources). The District was formed to “provide control of the Boise River and its tributaries in the affected area to protect life and property, preserve the public health and welfare and conserve and develop natural resources of the State of Idaho” (Order Creating Flood Control District No. 10 of Idaho) as they relate to potential flooding in Ada and Canyon Counties within the District’s boundaries. State law provides the District with statutory authority and responsibility to operate and maintain structural works of improvement for the prevention of floodwater and sediment damages, and to exercise all other powers necessary, convenient or incidental to carry out the provisions of the Flood Control District Act (Idaho Code sections 42-3101—42-3128).

Flood Control District No. 10 has observed continued rapid development along the Boise River within the jurisdictional boundaries. The District believes that land use changes significantly affect flood plain conveyance and storage, affecting individual sites and reaches above and below these sites. Development in the flood plain, combined with lack of channel forming flow events, sediment erosion and deposition, and the growth of gravel bars and associated vegetation, reduces the conveyance capacity of the Boise River, causes channel migration and increasing flooding risk. The District is also concerned that gravel pits developed adjacent to the banks of the river may be captured by the river during high flows, threatening both public and private facilities. The most

pressing issue facing the District in the future, minimizing flood impacts in the face of rapid growth requires river maintenance and protection of unimpeded access to the river, which will allow the District to continue normal maintenance activities, and effective planning for the Rivet corridor.

Historically, the District has had greater latitude to conduct responsibilities under the law and to maintain channel capacity. Flood Control District No. 10’s channel maintenance activities have become progressively more difficult to accomplish due to interpretations of regulations that vary over time and increasing concerns about environmental impacts. These factors combine to increase future flooding risks and damages for the residents within the boundaries of the District and impair the District’s ability to carry out responsibilities under the law.

The District is governed by a Board of three Commissioners, appointed by the Idaho Department of Water Resources. The District employs a staff of two; a District Manager and a part time Assistant District Manager. Revenues are generated through taxation collected on assessments on real property within the District.

The geographical extents of the District generally are along the Boise River and a portion of Dry Creek. Along the Boise River, the District is bounded by Chinden Blvd (State Highway 20-26) on the South, State Street (State Highway -44) on the North. The downstream limit is River Mile 22 (approximately 1- mile upstream of I-84 river bridges in Caldwell, ID), while the upstream limit is River Mile 49 (approximately 1-½ miles upstream of the Glenwood Bridge). In addition to the Boise River, a three mile long reach of Dry Creek, from the confluence with the Boise River upstream to Beacon Light Road in Eagle is included in the District boundaries.

The Boise River Flood Control District #10 Board assumes responsibility for the adoption of this plan; Boise River Flood Control District #10 will oversee its implementation.

12.2.2 Service Area

The district serves an area of 25,000 acres. The general boundary runs along the Boise River from approximately 50th Street in Garden City, Idaho to the single lane steel bridge just upstream of I-84 in Caldwell, Idaho. This covers the Flood Plain area along approximately 35 river miles.

12.2.3 Assets

Table 12-2 summarizes the assets of the District and their value.

Asset	Value
Property	
0 acres of land	N/A
Equipment	
9’ raft	\$900
Office equipment (computer/iPhone/printer)	\$1,800
Total:	\$2,700
Total:	\$0

12.3 CURRENT TRENDS

Flood Control District No. 10 has observed continued rapid development along the Boise River within the jurisdictional boundaries. The District believes that land use changes significantly affect flood plain conveyance and storage, affecting individual sites and reaches above and below these sites. Development in the flood plain, combined with lack of channel forming flow events, sediment erosion and deposition, and the growth of gravel bars and associated vegetation, has reduced the conveyance capacity of the Boise River and increases flooding risks. The District is also concerned that gravel pits developed adjacent to the banks of the river may be captured by the river during high flows, threatening both public and private facilities. The most pressing issue facing the District in the future, minimizing flood impacts in the face of rapid growth, requires river maintenance and protection of unimpeded District access to the river, which will allow the District to continue normal maintenance activities, and effective planning for the river corridor.

Home sites and businesses along both the Boise River and Dry Creek continue to command a premium in the marketplace. Current population within the District is growing at approximately 15-percent per year. As the economy begins to stabilize, population trends within the District are anticipated to level off to an annualized growth rate of eight to ten percent per year. Real estate values have increased by over 30% causing a considerable increase in Values-at-Risk which in turn affects damage costs and emphasizes the importance of preventive mitigation efforts.

12.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 12-3.
- An assessment of fiscal capabilities is presented in Table 12-4.
- An assessment of administrative and technical capabilities is presented in Table 12-5.
- An assessment of education and outreach capabilities is presented in Table 12-6.
- Classifications under various community mitigation programs are presented in Table 12-7.

Table 12-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
State of Idaho, Stream Channel Alteration Permit	2019	Permit No. S82-20069 Permit No. S82-20080 Permit No. S82-20091
US EPA, Clean Water Act, Section 404, Administered by the U.S. Army Corps of Engineers	Created 1972	

Plan, Study or Program	Date of Most Recent Update	Comment
US EPA, Clean Water Act, National Pollutant Discharge Elimination System (NPDES)	Created 1972	
Municipal and County Floodplain Ordinances – • Municipal: Boise, Garden City, Eagle, Meridian, Star, Middleton, Nampa, Caldwell • County: Ada and Canyon	May 12, 2020	City of Boise Ord. 15-20
	June 8, 2020	City of Garden City Ord. 1016-20
	July 23, 2019	City of Eagle Ord. 815
	May 12, 2020	City of Meridian Ord. 20-1879
	May 4, 2021	City of Star Ord. 336
	April 2, 2014	City of Middleton Ord. 531
	April 18, 2011	City of Nampa Ord. 3964
	March 4, 2019	City of Caldwell Ord. 3207
	June 10, 2020	Ada County Ord. 914
	August 30, 2019	Canyon County Ord. 19-038
County Highway Districts—Policy Manuals – • Ada County Highway District • Canyon County Highway District #4	June 25, 2015	Ada County Highway District
	April 27, 2017	Canyon County Highway District #4
County Hazard Mitigation Plans • Ada County • Canyon County	Update in progress	Ada County
	2021	Canyon County
The District Board of Commissioners have passed a number of resolutions dealing with floodplain development, including a no net adverse impact provision. These Resolutions remain in effect with this plan. • Resolution 02-2006 – A rise in BFE = Approved Flood Mitigation Plan Required • Resolution 07-2006 – Process for Review of Proposed Projects/Developments	July 12, 2006	FCD #10
	November 16, 2006	FCD #10

Table 12-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	No
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs – IDWR	Yes
Development Impact Fees for Homebuyers or Developers	No
Other	No

Table 12-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Contract Services	Yes
Engineers or professionals trained in building or infrastructure construction practices	No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Contract Services	Yes
Staff with training in benefit/cost analysis	No
Surveyors <i>If Yes, Department /Position:</i> Contract Services	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Contract Services	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Universities	Yes
Emergency manager	No
Grant writers	No
Other	No

Table 12-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office? Contract Public Relations person	Yes
Do you have personnel skilled or trained in website development?	Yes, Contract Services
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Incident response/Links to other government agencies	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Newspaper ads during maintenance operations/Safety messages.	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> 3-member Board of Commissioners	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? Website information and contact listings for response agencies.	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 12-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS# (Current in SAM system)	Yes	065072546	July 1, 2021
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Public Protection	No	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	Yes	N/A	N/A

12.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. The resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

12.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Resolution 02-2006** – A rise in BFE = Approved Flood Mitigation Plan Required
- **Resolution 07-2006** – Process for Review of Proposed Projects/Developments

12.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **FCD #10 5 Year Strategic Plan** – Boise River Flood Control District #10 will integrate portions of the Ada County Multi-Hazard Mitigation Plan into their 5 Year Strategic Plan that will be updated in November 2022.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

12.6 RISK ASSESSMENT

12.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 12-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 12-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	January 2020 and continuing	Flood damage recovery projects were delayed. \$ costs Not Available
Flooding	DR-4342	March 29-June 15, 2017	District minimum costs of \$375K/ Agencies costs Not Available
Laguna Point Pit Capture	N/A	2006	\$500,000
Brookwood Breach/Capture	N/A	2006	\$200,000
Mace Breach	N/A	2006	\$60,000
Eagle Isl. Levee Breach	N/A	1997	\$30,000
Linder Rd. Bridge Blockage	N/A	1996	\$2,000

12.6.2 Hazard Risk Ranking

Table 129 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings. The rankings are based on local experiences and understanding of the hazards. Extreme Weather storm surges cause sudden rise in river flows below Lucky Peak Dam, causing high pit capture risk for gravel mines and high localized flooding risk.

Table 12-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	45	High
2	Extreme Weather	33	High
3	Dam/Canal Failure	28	Medium
4	Drought	9	Low
5	Earthquake	6	Low
6	Landslide	6	Low
7	Wildfire	6	Low
8	Volcano	6	Low

12.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Development in the Floodplain, especially close to the riverbanks restricts access for the district to perform routine maintenance and hazard tree removal, increasing risk to high value properties.
- Sediment deposits from flooding events such as experienced in 2017, result in the buildup of gravel bars forcing the Boise River to flow out of bank at 3,000 to 4,000 cubic feet per second (cfs) in some areas of high-density population, causing localized flooding below normal out of bank flows of 7,000 cfs., which historically is the beginning of flood stage.
- When the Boise River channel is occluded by sediment/gravel deposition, the river attacks the banks causing significant erosion in some areas which result in significant loss and higher risk to public and private property.

- The 2017 flood event caused out-of-bank flooding for more than 100 continuous days. This resulted in high saturation of adjacent lands which lasted long after the water receded. Weakened banks and tree roots caused long term (approximately 2 yrs.) of higher-than-normal property damage from bank failure and tree debris in the river channel. Recovery projects and costs were higher than anticipated due to this long-term saturation.
- Tax levy funding for Flood Districts do not cover the cost of large flood mitigation projects. Funding for large flood mitigation projects depends upon grant funding. Grant applications are costly to prepare and if awarded, matching funds can be difficult to acquire, especially for smaller flood districts with limited tax base revenues to cover application costs.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

12.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 12-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 12-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action FCD10-1 —Support CRS program participation of participating jurisdictions within Ada County that interface with the FCD #10 operational area. <i>Comment:</i> FCD #10 is expanding cooperative efforts to work with stakeholders and an interagency basis. Ongoing action			✓	FCD10-1
Action FCD10-2 —Remove naturally occurring vegetative blockages in the river channels <i>Comment:</i> Annual River Maintenance Work. Ongoing			✓	FCD10-4
Action FCD10-3 —Modify FCD #10 website to include links to flood hazard mitigation and preparedness sites. <i>Comment:</i> Contracted PR person to manage website and public outreach. Ongoing action			✓	FCD10-5
Action FCD10-4 —Develop partnership with local City/County Planning and Zoning staffs to mitigate flood risk <i>Comment:</i> Sponsored interagency conference to build cooperative stakeholder relationships. Conducted interagency outreach to stakeholders for matching funds for flood mitigation grant applications. Ongoing			✓	FCD10-6
Action FCD10-5 —Update FEMA mapping within the district <i>Comment:</i> Working with Army Corps of Engineers and stakeholders FCD #10 secured a grant and developed a 2-D model for scientifically analyzing the river dynamics and using bathometric science-based information for making mitigation management decisions. User training and a Comprehensive Plan for model use is being developed prior to final completion of this project. This 2-D model (Known locally as the 2-D Boise River Management Tool - I.e., 2-D BRMT) is currently being successfully used by engineers and is proving to be the best available data which exceeds 1-D model data. Other products and studies will be available for use by stakeholders in a wide spectrum of riverine management in addition to flood mitigation. Ongoing			✓	FCD10-7
Action FCD10-6 —Remove accumulated sediment from Boise River and Dry Cr. <i>Comment:</i> Annual Maintenance Work to remove woody debris. Secure Grant funding to Develop long term plan for sediment/gravel management. Work in coordination with Cities and Counties to develop a Gravel Management Plan using the 2-D Boise River Management Tool (BRMT) to include a Digital Elevation Model of difference (DoD) map and biomass model. Ongoing			✓	FCD10-8

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action FCD10-7 —Develop long term plan to manage Boise River at the Head of Eagle Island split. <i>Comment:</i> Using the 2-D model (see #5 above) to perform engineering analysis to provide solutions for reducing flood risk. Ongoing			✓	FCD10-9
Action FCD10-8 —Develop floodplain mitigation techniques to apply vegetative structures in the stream channels. <i>Comment:</i> See #7 above. Expand use of vegetative applications within bank repairs and levee maintenance projects. Ongoing			✓	FCD10-10
Action FCD10-9 —Irrigation Diversion Headgate Flood Mitigation <i>Comment:</i> Cooperate with irrigation companies to remove debris during annual FCD #10 River Maintenance. Ongoing			✓	FCD10-11
Action FCD10-10 —Support County-wide initiatives identified in Volume 1 <i>Comment:</i> Ongoing			✓	FCD10-3
Action FCD10-11 —Continue to support the implementation, monitoring, maintenance and updating of this plan as defined in Volume 1. <i>Comment:</i> Ongoing			✓	FCD10-2
Action FCD10-12 — Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation projects. <i>Comment:</i> Ongoing			✓	FCD10-12

12.8 HAZARD MITIGATION ACTION PLAN

Table 12-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 12-12 identifies the priority for each action. Table 12-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 12-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action FCD10-1 — Support CRS program participation of participating jurisdictions within Ada County that interface with the FCD #10 operational area. <i>Hazards Mitigated:</i> Flood						
Existing	2, 3, 4, 5, 6, 8, 9, 10	FCD #10	N/A	Low	FCD #10	Ongoing
Action FCD10-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. <i>Hazards Mitigated:</i> All hazards						
New & Existing	All	FCD #10	EMCR	Low	Staff Time, General Funds	Short-term
Action FCD10-3 — Support County-wide initiatives identified in Volume 1. <i>Hazards Mitigated:</i> All hazards						
New & Existing	All	FCD #10	EMCR	Low	Staff Time, General Funds	Short-term
Action FCD10-4 — Remove naturally occurring vegetative blockages in the river channels <i>Hazards Mitigated:</i> Flood, Severe Weather						
Existing	2, 8, 9	FCD #10	N/A	Medium	FCD #10	Ongoing
Action FCD10-5 — Modify FCD #10 website to include links to flood hazard mitigation and preparedness sites. <i>Hazards Mitigated:</i> All hazards						
Existing	2, 3, 7, 8, 9, 10	FCD #10	N/A	Low	FCD #10	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action FCD10-6 — Develop partnership with local City/County Planning and Zoning staff to mitigate flood risk						
<u>Hazards Mitigated:</u> Flood, Dam/Canal Failure, Extreme Weather						
New & Existing	1, 2, 4, 5, 6, 8, 9, 10	FCD #10	N/A	Low	FCD #10, Staffs	Ongoing
Action FCD10-7 — Update FEMA mapping within the District						
<u>Hazards Mitigated:</u> Flood, Dam/Canal Failure						
New & Existing	2, 4, 8, 9	FCD #10	N/A	Medium	FCD #10, FEMA (HMGP, BRIC, FMA) & State Grants	Long-term
Action FCD10-8 — Develop a plan to manage accumulated sediment from Boise River and Dry Creek identified high risk sites						
<u>Hazards Mitigated:</u> Flood, Extreme Weather						
New & Existing	1, 2, 8, 9	FCD #10	Cities, Counties, Army Corps of Engineers, Idaho Dept. Of Water Resources, Idaho Dept. Of Lands	High	FCD #10, State and Federal Grants	Long-term
Action FCD10-9 — Develop long term plan to manage Boise River flow impacts at the Head of Eagle Island.						
<u>Hazards Mitigated:</u> Flood, Extreme Weather						
New & Existing	2, 3, 6, 8, 9, 10	FCD #10	Cities/Ada County	High	FCD #10, FEMA (HMGP, BRIC, FMA) & State Grants	Long-term
Action FCD10-10 — Scientifically analyze floodplain mitigation techniques to apply vegetative structures in the stream channels.						
<u>Hazards Mitigated:</u> Flood, Dam/Canal Failure, Extreme Weather						
Existing	2, 6, 9	FCD #10	N/A	Medium	FCD #10, State Grants	Long-term
Action FCD10-11 — Irrigation Diversion Headgate Flood Mitigation						
<u>Hazards Mitigated:</u> Flood						
Existing	1, 8, 9, 10	FCD #10	N/A	Low	FCD #10, Irrigators	Ongoing
Action FCD10-12 — Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation and fuel-reduction projects, including prescribed fire (Rx fire), pile-burning and managed fire. Increase capacity to conduct these projects through hiring personnel and expenditures for equipment and biological control methods. (Coordinates with City of Boise Action B-15, North Ada County Fire & Rescue District Action NACFR-15, Whitney Fire Protection District WFD-8)						
<u>Hazards Mitigated:</u> Wildfire						
New & Existing	1, 6, 9, 10	Boise Fire Department	FCD #10, NACFR, Whitney Fire	Low	Local funds	Ongoing
Action FCD10-13 — Incorporate ACHMP into District 5-year Strategic Plan						
<u>Hazards Mitigated:</u> Flood						
Existing	2, 6, 8, 9, 10	FCD #10	N/A	Low	FCD #10	Short-term
Action FCD10-14 — Develop Administrative/Operations Plan to guide Flood District activity growth.						
<u>Hazards Mitigated:</u> Flood						
New & Existing	2, 6, 8, 9, 10	FCD #10	N/A	Low	FCD #10	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action FCD10-15 —Work with Ada County to develop a channel and gravel management plan, leveraging the Boise River Management Tool (2-D BRMT), including a Digital Elevation Model of difference (DoD) map and biomass model in the river along Unincorporated Ada County. (Coordinates with Unincorporated Ada County Action AC-23)						
<i>Hazards Mitigated:</i> Flood						
New & Existing	2, 6, 8, 9, 10	FCD #10	Ada County Development Services	Low	FCD #10, Ada County Development Services	Short-term
Action FCD10-16 — Evaluate riverbank integrity of the Boise River in the areas of interface with buildings and infrastructure. Determine and employ the best methodology to either repair damaged areas or harden other areas that may directly threaten buildings or infrastructure during high flow events. (Coordinates with the City of Star Action S-10)						
<i>Hazards Mitigated:</i> Flood, Extreme Weather, Dam/Canal Failure						
New & Existing	1, 2, 9, 10	FCD #10	City of Star	Medium	HMGP, FCD #10, City of Star CIP Funding	Long-term
Action FCD10-17 —Follow CDC guidelines for COVID avoidance.						
<i>Hazards Mitigated:</i> Public Health						
New	2, 6, 12	FCD #10	N/A	Low	FCD #10	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 12-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	Medium	Low	Yes	No	Yes	High	Low
2	10	Low	Low	Yes	No	Yes	High	Low
3	10	Low	Low	Yes	No	Yes	High	Low
4	3	High	Low	Yes	Yes	Yes	High	High
5	6	Low	Low	Yes	No	Yes	High	Low
6	8	Medium	Low	Yes	No	Yes	High	Low
7	4	Medium	Medium	Yes	Yes	No	Medium	Medium
8	4	High	High	Yes	Yes	No	Medium	High
9	6	High	High	Yes	Yes	No	Medium	High
10	3	Medium	Medium	Yes	Yes	No	Low	Low
11	4	Low	Low	Yes	No	Yes	Low	Low
12	4	Medium	Low	Yes	No	Yes	Low	Low
13	5	Medium	Low	Yes	No	Yes	High	Low
14	5	Medium	Low	Yes	No	Yes	High	Low
15	5	Medium	Low	Yes	No	Yes	High	Low
16	4	Medium	Medium	Yes	Yes	No	Medium	Medium
17	2	Medium	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 12-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Flood	FCD10-1, 2, 3, 4, 6, 8, 9, 10	FCD10-3, 4, 6, 7, 8, 9, 10, 11, 12	FCD10-1, 3, 5, 6, 10, 12	FCD10-4, 8, 9, 10	FCD10-3, 6	FCD10-8, 9, 16		FCD10-3, 6, 7, 12, 13, 14, 15, 16
Extreme Weather	FCD10-2, 4, 8, 9	FCD10-1, 2, 3, 4, 8, 9	FCD10-3, 5, 12	FCD10-4, 8, 9, 10, 12	FCD10-1, 6	FCD10-16		FCD10-3, 6, 12, 16
Medium-Risk Hazards								
Dam/Canal Failure	FCD10-2, 3, 6	FCD10-4, 6, 7, 9	FCD10-3, 5, 6	FCD10-8, 9, 10	FCD10-3, 5, 6	FCD10-16		FCD10-3, 6, 7, 16
Low-Risk Hazards								
Drought	FCD10-2, 3		FCD10-2, 3, 5					FCD10-2, 3
Earthquake	FCD10-2, 3		FCD10-2, 3, 5					FCD10-2, 3
Landslide	FCD10-2, 3		FCD10-2, 3, 5					FCD10-2, 3
Wildfire	FCD10-2, 3		FCD10-2, 3, 5		FCD10-12		FCD10-12	FCD10-2, 3
Volcano								FCD10-2, 3

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

12.9 PUBLIC OUTREACH

Table 12-14 lists public outreach activities for this jurisdiction.

Table 12-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Website	Developed in 2019	Unknown
Interagency Flood Mitigation Seminar	2018	75

12.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **State of Idaho, Stream Channel Alteration Permit** – Reviewed for the capability assessment.
- **US EPA, Clean Water Act** – Reviewed for the capability assessment.
- **Municipal and County Floodplain Ordinances (Boise, Garden City, Eagle, Meridian, Star, Middleton, Nampa, Caldwell, Ada County, Canyon County)** – Reviewed for the capability assessment.

- **Floodplain Development Resolutions (02-2006, 07-2006)** – Reviewed for the capability assessment.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

12.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Due to the population growth and the explosion of values at risk in the Treasure Valley, Boise River Flood Control District #10 is experiencing a significant growth in the overall flood mitigation workload required to meet the mission requirements found in the Idaho Statutes that created the district in 1970. The district is developing Position Descriptions, Administrative Guidelines, and an Operations Handbook to support the expansion of the Board and Staffing needed to handle the expanded workload going forward. Current Special District Tax levies from residents within the district boundaries do not fully support the costs of performing the Flood Mitigation mission. A change in funding flood districts with this level of growth is required to meet the demands. Grant funding has helped but is not the long-term answer for meeting the Flood District expanding demands.

13. GREATER BOISE AUDITORIUM DISTRICT

13.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Pat Rice, Executive Director
850 West Front Street
Boise, ID 38702
Telephone: 208-489-3650
e-mail Address: pat_rice@boisecentre.com

Alternate Point of Contact

Brandon Doty, Safety & Security Manager
850 West Front Street
Boise, ID 83702
Telephone: 208-489-3607
e-mail Address: bdoty@boisecentre.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 13-1.

Table 13-1. Local Hazard Mitigation Planning Team Members

Name	Title
Brandon Doty	Safety & Security Manager
Pat Rice	Executive Director
Cody Lund	Assistant Executive Director
Nick Souba	Director of Operations
Anne Marie Downen	Director of Finance
David Gregori	Facility Manager

13.2 JURISDICTION PROFILE

13.2.1 Overview

The Greater Boise Auditorium District was created by voters within the District's boundaries on June, 9 1959 to build, operate, maintain, market and manage public auditoriums, exhibit halls, convention centers, sports arenas, and other similar facilities. The District is represented by an elected, five member, Board of Directors. The District boundaries go beyond the City of Boise to include: all of Garden City, portions of the cities of Eagle and Meridian, and includes some unincorporated areas. The purpose of the District is to serve the public need and promote economic growth. In 1990, the Greater Boise Auditorium District completed construction of the Boise Centre on the Grove, (convention center) the District's first convention facility, known today as Boise Centre. With the expansion and renovations projects completed Boise Centre has the tools necessary to complete for larger convention groups and host multiple meetings and events simultaneously.

The District worked diligently over several years to establish an expansion project, later called Boise Centre East. Completed in August of 2016, the project added 38,250 square feet of space, including an additional ballroom,

meeting rooms, lobbies, and a commercial kitchen. The Boise Centre East expansion brought Boise Centre to a total of 88,250 square feet.

The Greater Boise Auditorium District assumes responsibility for the adoption of this plan; Boise Centre will oversee its implementation.

13.2.2 Service Area

The District service area covers an estimated population of 328,959, based off of U.S. Census data from 2019. Land area served is approximately 180 square miles.

The District’s boundaries are shown in Figure 13-1.

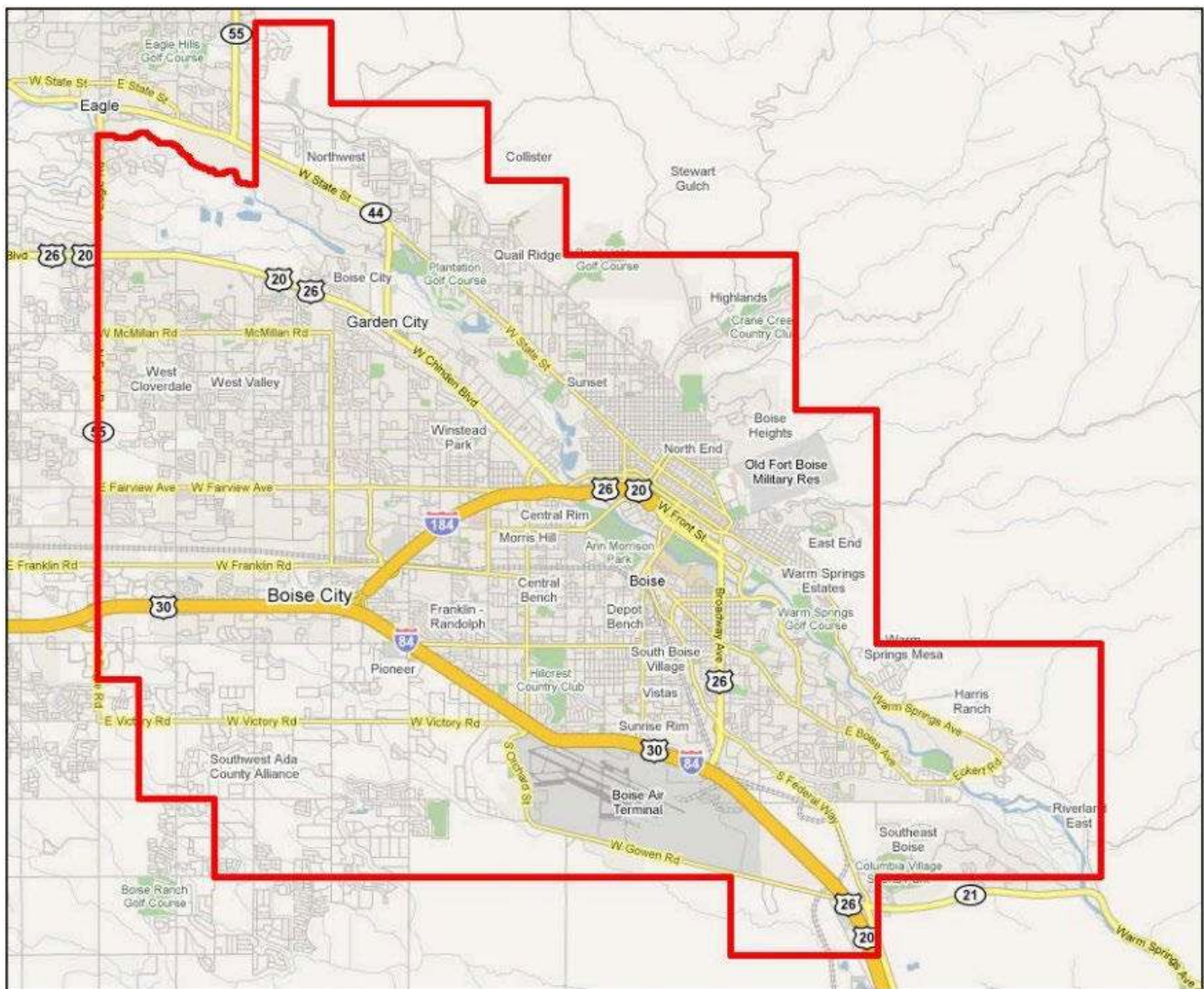


Figure 13-1. Greater Boise Auditorium District boundary

13.2.3 Assets

Table 13-2 summarizes the assets of the District and their value.

Asset	Value
Property	
5.705 acres of land ^a	\$11,888,250 ^a
Equipment	
Emergency Generator System	\$75,000
Air Cooling Chiller & Plumbing	\$750,000
Geothermal Heating & System	\$100,000
Boiler Heating & System	\$150,000
Kitchen & Food Prep	\$1,800,000
Total:	\$7,350,000
Critical Facilities	
Boise Centre West	\$48,730,500
Boise Centre Sales Office and Warehouse	\$678,760
Boise Centre East	\$13,052,000
Aquatics Facility Cover ^a	\$3,125,000 ^a
Total:	\$62,461,260^a

a. The District purchased 3.73 acres of land in October of 2021 for the addition of an aquatics facility, to be built and operated by Idaho Competitive Aquatics (ICA).

13.3 CURRENT TRENDS

The District foresees continued growth opportunity for the meetings and convention industry.

- The District has no taxing authority on the District population. The main funding source comes from the collection of a hotel room tax from hotels within the District, currently at 5%.
- Both impact and growth studies continue to show glowing results for the District.
- The District purchased 3.73 acres of land in October of 2021 for the addition of an aquatics facility, to be built and operated by Idaho Competitive Aquatics (ICA).
- Boise continues to see an increase in interest as a destination for conventions and meetings.
- Additional hotels recently built in Boise have increased revenue from the tax collected within the District.
- The expansion has allowed Boise Centre to go after a larger market of convention, meeting, and association event business.

13.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 13-3.
- An assessment of fiscal capabilities is presented in Table 13-4.
- An assessment of administrative and technical capabilities is presented in Table 13-5.
- An assessment of education and outreach capabilities is presented in Table 13-6.
- Classifications under various community mitigation programs are presented in Table 13-7.

Table 13-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Emergency Procedures Guide	August 2021	N/A
Idaho State Code Title 67, Chapter 49	June 1959	N/A
Information Technologies Security Policy	November 2021	N/A

Table 13-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service	No
<i>If yes, specify:</i>	
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	No
Development Impact Fees for Homebuyers or Developers	No
Other	No
<i>If yes, specify:</i>	

Table 13-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	No
Engineers or professionals trained in building or infrastructure construction practices	No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Safety & Security Manager	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Director of Finance	Yes
Surveyors	No
Personnel skilled or trained in GIS applications	No
Scientist familiar with natural hazards in local area	No
Emergency manager <i>If Yes, Department /Position:</i> Safety & Security Manager	Yes
Grant writers	No
Information Technology Department <i>If Yes, Department /Position:</i> IT Manager	Yes

Table 13-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes – Communications Manager
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website?	No
Do you use social media for hazard mitigation education and outreach?	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Safety Committee	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 13-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS#	Yes	878208925	1990
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Public Protection	No	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

13.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

13.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Capital Facilities Planning – The Boise Centre maintains a disciplined program for making capital investments and managing its capital resources within eligible and allowable uses. This policy applies to assets not held for resale. This policy applies to all construction, capital improvements, equipment purchases, special projects and intangible assets and only applies to the Boise Centre proprietary fund. The government fund uses the current financial resources measurement focus and uses the write off approach. (Capital Expenditures Policy, Boise Centre).
- Emergency Management Planning by Ada County EMCR – Wherever possible, GBAD will partner with Ada County’s Emergency Management and Community Resilience in support of preparedness, prevention, response, recovery, and mitigation activities, such as the Ada County Hazard Mitigation Plan.

13.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Future updates to GBAD capital facility planning—Capital facility planning may use hazard maps and data from this hazard mitigation plan when prioritizing projects.
- Future updates to GBAD Emergency Operations Plan and Crisis Communication Plan—The EOP and CCP may use data from this hazard mitigation plan to establish priorities in each plan.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

13.6 RISK ASSESSMENT

13.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 13-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 13-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Severe Weather	N/A	January 2017	Site inspection and assessment
Earthquake	N/A	March 31, 2020	Site inspection and assessment
Power Outages	N/A	Multiple dates between 2017 and present	Site and equipment inspections
COVID-19 Pandemic	DR-4534	January 20, 2020 and continuing	\$2.992 million in lost hotel lodging taxes to the District and an additional \$9.137 million in lost revenue from canceled event bookings in 2020 and 2021.

13.6.2 Hazard Risk Ranking

Table 13-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 13-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	33	High
2	Earthquake	33	High
3	Extreme Weather	33	High
4	Drought	18	Medium
5	Dam/Canal Failure	18	Medium
6	Wildfire	12	Low
7	Landslide	12	Low
8	Volcano	6	Low

13.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Back up electrical generator and other critical infrastructure are located below grade and are at risk for flooding failure.
- Boise Centre West's 100 Ballroom ceiling equipment is not adequately secured for seismic activity.
- Water for Boise Centre is supplied by the City of Boise, including fire sprinkler and potable water.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

13.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 13-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 13-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Initiative #1 —Elevate Critical Equipment From Basement <i>Comment: No Progress. No solution settled on or funded at this time.</i>			•	GBAD-4
Initiative #2 —Flood Proof Critical Equipment In Basement <i>Comment: No Progress. No solution or funding available at the time.</i>			•	GBAD-5
Initiative #3 —Secure Drop Ceiling Light Fixtures To Standard <i>Comment: In Progress. Beginning process of assessing structure and ceiling. Currently evaluating structure and electrical. This project will be planned for 2022, but is subject to change following COVID-19’s economic impact on our organization.</i>			•	GBAD-6
Initiative #4 —Water Storage Tank- Clean water in case of contamination to city/public water. <i>Comment: No Progress. No current funds or solution in place. Looking at this for future years to help with resiliency for community disaster relief.</i>			•	GBAD-7
Initiative #5 —Support, Monitor, and Continually Update This Plan <i>Comment: Ongoing Capability. Current review in progress and ongoing. Actively participating in process.</i>			•	GBAD-2
Initiative #6 —Support and Be Actively Involved With Ada County Plan <i>Comment: Ongoing Capability. Current review in progress and ongoing. Actively participating in process.</i>			•	GBAD-8

13.8 HAZARD MITIGATION ACTION PLAN

Table 13-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 13-12 identifies the priority for each action. Table 13-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 13-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action GBAD-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. <i>Hazards Mitigated:</i> Flood, Earthquake, Dam/Canal Failure, Severe Weather, Wildfire, Landslide						
Existing	All	District	N/A	High	HMGP, BRIC, FMA	Short-term
Action GBAD-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. <i>Hazards Mitigated:</i> All Hazards						
New & Existing	All	District	Ada County EMCR	Low	Staff Time, District Funds	Short-term
Action GBAD-3 — Purchase additional mobile generators for critical facilities and infrastructure that lack adequate backup power, including commercial freezers and ice machines. <i>Hazards Mitigated:</i> Flood, Earthquake, Dam/Canal Failure, Severe Weather, Wildfire, Landslide						
New & Existing	All	District	Ada County EMCR	High	HMGP, BRIC	Short-term
Action GBAD-4 — Elevate critical equipment from basement, including the emergency generator, IT equipment, <i>Hazards Mitigated:</i> Flood						
Existing	1, 3, 10	District	N/A	\$2 Million	District Funds, HMGP, BRIC, FMA	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action GBAD-5 — Flood Proof Critical Equipment In Basement						
<i>Hazards Mitigated:</i> Flood						
Existing	1, 3, 10	District	N/A	\$1 Million	District Funds, HMGP, BRIC, FMA	Short Term
Action GBAD-6 — Retrofit the ballroom drop-ceiling to meet seismic building code, including light fixtures, HVAC, and other equipment in the drop-ceiling.						
<i>Hazards Mitigated:</i> Earthquake						
Existing	1, 3, 10	District	N/A	\$1.5 Million	District Funds, BRIC	Short Term
Action GBAD-7 — Install a 1,500 gallon water storage tank, to sustain non-contaminated source of water and combat effects of drought for 24 hours.						
<i>Hazards Mitigated:</i> Flood, Drought						
Existing	All	District	N/A	High	District Fund, HMGP, BRIC, FMA	Long Term
Action GBAD-8 — Support County-wide initiatives identified in Volume 1						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	All	District	Ada County EMCR	Low	Staff Time, District Funds	Short-term
Action GBAD-9 — Conduct an emergency backup power monitoring study to determine existing generator load capability and future emergency power load needs.						
<i>Hazards Mitigated:</i> Flood, Severe Weather						
Existing	1, 2, 3, 4, 10	District	N/A	\$20,000	District Funds, BRIC, HMGP	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 13-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	10	High	High	Yes	Yes	No	Medium	High
2	10	Low	Low	Yes	No	Yes	High	Low
3	10	High	High	Yes	Yes	No	Medium	High
4	3	High	High	Yes	Yes	No	Medium	High
5	3	High	High	Low	Yes	No	Medium	High
6	3	High	Medium	Yes	Yes	Yes	High	Low
7	10	High	Medium	Yes	Yes	No	Low	High
8	10	Low	Low	Yes	No	Yes	High	Low
9	5	High	Medium	Yes	Yes	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 13-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Flood		GBAD-1, 4, 5			GBAD-3			GBAD-2, 8, 9
Earthquake		GBAD-1, 6			GBAD-3		GBAD-7	GBAD-2, 8
Extreme Weather		GBAD-1			GBAD-3			GBAD-2, 8, 9
Medium-Risk Hazards								
Dam/Canal Failure		GBAD-1			GBAD-3			GBAD-2, 8
Drought								GBAD-2, 8
Low-Risk Hazards								
Wildfire		GBAD-1			GBAD-3			GBAD-2, 8
Landslide		GBAD-1			GBAD-3			GBAD-2, 8
Volcano								GBAD-2, 8

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

13.9 PUBLIC OUTREACH

Table 13-14 lists public outreach activities for this jurisdiction.

Table 13-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Safety Committee	Meets the second Tuesday of each month	12
Code Red	N/A	N/A
Teldio/Twilio Mass Notification System	June 2021	4
City of Boise Special Events Committee	Meets every other Wednesday	2

13.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **Boise Centre’s Capital Expenditures Policy** – This policy is utilized to identify how and what projects can be budgeted with GBAD’s capital funds.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

14. INDEPENDENT SCHOOL DISTRICT OF BOISE #1

14.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Bill McKitrick
8169 W. Victory Rd
Boise, ID 83709
Telephone: 208-854-4086
e-mail Address: Bill.McKitrick@Boiseschools.org

Alternate Point of Contact

Lisa Roberts
8169 W. Victory Rd
Boise, ID 83709
Telephone: 208-854-4774
e-mail Address: Lisa.Roberts@boiseschools.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 14-1.

Table 14-1. Local Hazard Mitigation Planning Team Members

Name	Title
Lisa Roberts	Deputy Superintendent
Bill McKitrick	Safety and Security Supervisor
Tom Willis	Facilities Administrator
Kyle Dennis	Assistant Facilities Administrator

14.2 JURISDICTION PROFILE

14.2.1 Overview

Enrollment in the Boise School District has been relatively level over the last four years. BSD is the second largest district in the State of Idaho with over 25,500 students. The FY 2020-21 budget uses a predicted District enrollment decrease of 400 students. The District anticipates a decrease at the elementary level as smaller class sizes enter the District. Birth rates in Ada County have decreased from a high of 5,788 in 2007 to 4,861 in 2018. The State Charter Commission did not approve any new charters within the District boundaries for 2020-21

The Boise School District assumes responsibility for the adoption of this plan; Safety and Security Steering Committee will oversee its implementation.

14.2.2 Service Area

The Boise School District is a PreK-12 grade public school district, serves approximately 25,500 students in 48 schools and employs approximately 4,300 people, of whom approximately 1,890 are certified staff. In the district, there are 33 elementary schools, 8 junior high schools, 5 senior high schools, and 1 online school.

14.2.3 Assets

Table 14-2 summarizes the assets of the District and their value.

Asset	Value
Equipment	
Electric Forklift	\$ 22,156.00
Front End Loader	\$ 53,215.00
Deep Tine Aerator	\$ 20,488.00
Turf Sweeper	\$ 20,744.00
Tractor	\$ 27,790.00
Diesel Mower	\$ 72,910.00
Mini Excavators	\$ 36,671.00
Mini Excavators	\$ 26,758.80
Stock Picker Crown	\$ 26,597.89
Reach Truck Crown	\$ 42,573.67
Mower HR700	\$ 79,965.33
Mower HR700	\$ 79,965.33
Pump Machine	\$ 20,762.50
Lawn Mover	\$ 23,209.20
2015 Ford Escape	\$ 22,234.84
2014 Chevy Silverado	\$ 25,233.00
2009 GMC ¾ 4x4	\$ 20,881.00
2009 GMC ¾ 4x4	\$ 22,196.00
2013 Chevy Silverado	\$ 22,196.00
2013 Chevy Silverado	\$22,417.73
2013 Chevy Silverado	\$22,415.54
2007 GMC Savana	\$22,415.54
2007 GMC Savana	\$28,343.00
2007 GMC Savana	\$28,343.00
2012 Chevy RWD 3500	\$28,343.00
2013 CMC Savana	\$33,171.00
1996 Gruman GMC	\$35,488.00
1996 Gruman GMC	\$27,969.00
2002 Ford E-450	\$32,349.80
1997 Ford &-700	\$35,497.10
2005 Chevy Truck	\$38,095.00
2018 Ford Cargo Van	\$30,101.00
2018 Chevy Cargo Van	\$20,984.06
2018 Chevy Cargo Van	\$20,984.06
2018 Chevy Cargo Van	\$20,984.06
2018 Chevy Cargo Van	\$20,984.06
2018 Chevy Cargo Van	\$20,984.06
2006 Ford F750	\$27,790.00

Asset	Value
Sideflow Down Draft Spray Booth	\$29,132.00
Sideflow Down Draft Spray Booth	\$29,132.00
Clausing Colchester Lathe Center	\$97,470.00
Bridgeport Milling Machine w/ Access.	\$76,400.00
Hass Mini Mill Machining Center	\$33,021.75
Hydraulic Press Brake	\$27,936.90
X-660 Laser System	\$21,250.00
Hunter Alignment and Balancer	\$36,830.70
Haas SI-10 CNC Turning Center	\$45,978.00
Hetra 15,000 Lb Lift Post w/Hook-Up	\$34,316.64
Car-O-Liner Straightener w/Access	\$30,000.00
Hunter Alignment and Balancer	\$23,238.50
Laser Cutting System	\$25,910.00
Retro Systems Hornet HS	\$47,449.00
Tire Changer Hunter Revolution	\$30,139.00
Alex Pro Patient Dummy	\$31,290.00
Spray Bay	\$28,350.00
HD Vertical Machine	\$63,400.00
Rotary Lift 12000lbs	\$20,247.00
Universal Laser System Borah	\$24,461.00
Universal Laser System Capital	\$24,461.00
Custom Fluid Company Robot	\$33,000.00
King Machine Simulator Milling Machine	\$22,388.75
Tek Pipeline, LLC Super Micro computer	\$21,382.85
Mohawk Resources, LTD Tire Drum	\$24,457.04
King Machine Simulator Milling Machine	\$22,388.75
<i>Total:</i>	<i>\$2,116,803.54</i>
Critical Facilities	
Adams Elementary School	\$6,414,904
Amity Elementary School	\$16,326,146
ASCENT	\$1,258,455
Boise High	\$37,990,998
Borah High	\$21,875,809
Capital High	\$58,145,701
Collister Elementary School	\$6,371,220
Cynthia Mann Elementary School	\$12,455,471
Fort Boise 300 W. Fort St.	\$7,788,668
Garfield Elementary	\$11,624,220
Grace Jordan Elementary School	\$13,701,475
Hawthorne Elementary Schoo	\$9,234,791
Hidden Springs Elementary	\$3,291,010
Highlands Elementary	\$17,212,500
Hillcrest Elementary	\$8,427,500

Asset	Value
Hillside Jr. High	\$16,608,255
Horizon	\$12,675,905
Jefferson Elementary	\$9,983,906
Koelsch Elementary	\$11,342,523
Les Bois Jr. High	\$31,721,238
Liberty Elementary	\$12,283,999
Longfellow Elementary	\$6,497,068
Lowell Elementary	\$11,053,871
Madison ECC	\$2,545,056
Maple Grove Elementary	\$9,329,106
Monroe Elementary	\$5,270,585
Morley Nelson	\$13,539,500
Mountain View Elementary	\$17,850,000
North Jr. High	\$25,293,264
Owyhee Elementary	\$6,532,063
Pierce Park Elementary	\$18,487,500
Riverglen Jr. High	\$31,559,731
Riverside Elementar	\$12,711,474
Roosevelt Elementary	\$8,443,996
Shadow Hills Elementar	\$12,077,110
South Jr. High	\$31,937,931
STEP Program	\$1,339,515
Taft Elementary	\$7,308,056
Timberline High	\$53,430,343
Trail Wind	\$11,760,783
Valley View Elementary	\$20,000,000
Washington Elementary	\$18,750,000
West Jr. High	\$29,709,785
White Pine	\$12,645,181
Whitney Elementary	\$15,449,458
Whittier Elementary	\$15,205,446
Facilities & Operations	\$12,750,000
District Service Center	\$8,047,759
<i>Total:</i>	<i>\$746,259,275</i>

14.3 CURRENT TRENDS

District population continues to increase as development progresses, particularly in the southern end of the district. A new high school, junior high and 2 elementary schools are to be needed to adequately service the increased development.

14.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 14-3.
- An assessment of fiscal capabilities is presented in Table 14-4.
- An assessment of administrative and technical capabilities is presented in Table 14-5.
- An assessment of education and outreach capabilities is presented in Table 14-6.
- Classifications under various community mitigation programs are presented in Table 14-7.

Table 14-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Board Policy 9310- Facility Safety Program	4/10/17	N/A
Board Policy 3313-Safe and Secure Learning/Work Environment	7/01/21	N/A
Boise Schools Emergency Operations Plans	10/01/21	N/A

Table 14-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	No
Development Impact Fees for Homebuyers or Developers	No

Table 14-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	No
Engineers or professionals trained in building or infrastructure construction practices	No
Planners or engineers with an understanding of natural hazards	No
Staff with training in benefit/cost analysis	No
Surveyors	No
Personnel skilled or trained in GIS applications	Yes
<i>If Yes, Department /Position:</i> Boundaries and Transportation	
Scientist familiar with natural hazards in local area	No
Emergency manager	Yes
<i>If Yes, Department /Position:</i> Safety and Security Specialist	
Grant writers	No
Other	No
<i>If Yes, Department /Position:</i>	

Table 14-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes- Dan Hollar, Public Affairs
Do you have personnel skilled or trained in website development?	Yes- Will Goodman, Technology Admin
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Periodic/seasonal updates on hazards	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Winter Storm Safety Notification	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Safety and Security Advisory Committee	Yes
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Parent/Community Newsletters/Communications	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 14-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS#	Yes	122740046	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	N/A	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

14.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

14.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Site Emergency Operations Plans-** School EOPs are crafted and reviewed annually based on an individualized threat profile for each school. Threat profiles include elements of hazard mitigation plans as appropriate for the site.

14.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- [Facilities Master Plan](#)—The Facilities Master Plan may reference hazard mapping and data from this hazard mitigation plan when updating recommended project lists.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

14.6 RISK ASSESSMENT

14.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 14-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 14-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	January 20, 2020 and continuing	All School Cancelled/Virtual
Flooding	DR-4342	March 29 – June 15, 2017	N/A
Wildfires	DR-1341	July 27 – September 26, 2000	N/A
Earthquake	N/A	March 31, 2020	N/A

Type of Event	FEMA Disaster #	Date	Damage Assessment
Winter Weather Cancellation	N/A	11/14/2014	All School Cancelled
Winter Weather Cancellation	N/A	2/27/14	All School Cancelled
Winter Weather Cancellation	N/A	1/10/2013	All School Cancelled
Winter Weather Cancellation	N/A	12/1/2010	All School Cancelled

14.6.2 Hazard Risk Ranking

Table 14-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 14-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Wildfire	22	Medium
3	Flood	18	Medium
4	Dam/Canal Failure	18	Medium
5	Earthquake	16	Medium
6	Landslide	12	Low
7	Drought	9	Low
8	Volcano	6	Low

14.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Wild land fire- Interface schools
- Landslide- Foothills schools
- Extreme Weather/Winter Storms- All schools
- Seismic- All schools
- Public Health Hazards- All schools (faculty and students) are extremely vulnerable to public health hazards. This is very evident due to the impacts during the COVID-19 pandemic.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

14.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 14-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 14-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action BSD-1 —Retrofit Unreinforced Masonry Structures <i>Comment:</i> Continues through retrofit of existing structures and the completion of several new buildings.			•	BSD-1
Action BSD-2 —Mobile Generators for Shelter Facilities <i>Comment:</i> Continue to fund as budget is allowing			•	BSD-3
Action BSD-3 —Partner with EMCR for disaster response and preparedness, including updates to the county EOP <i>Comment:</i> Continues. EOPs have successfully been shared with community resources including access to live cameras at all sites and electronic door access.			•	BSD-4
Action BSD-4 —Continue internal (staff) and external (student/family) hazard education programs. <i>Comment:</i> Progress continues and now includes ISCRS.			•	BSD-5
Action BSD-5 —Coordinate building EOP documents into county-wide EOP parameters <i>Comment:</i> Continues. EOPs now incorporates ISCRS at all facilities.			•	BSD-6
Action BSD-6 —Support County-wide initiatives identified in Volume 1. <i>Comment:</i> Continues district wide			•	BSD-7
Action BSD-7 —Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1. <i>Comment:</i> Continues district wide			•	BSD-2

14.8 HAZARD MITIGATION ACTION PLAN

Table 14-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 14-12 identifies the priority for each action. Table 14-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 14-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action BSD-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those with unreinforced masonry or that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. <i>Hazards Mitigated:</i> Earthquake, Extreme Weather, Flood, Wildfire						
Existing	1, 2, 3, 10	BSD		High	District Funds/Bonds, HMGP, BRIC, FMA	Long-term
Action BSD-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. <i>Hazards Mitigated:</i> All hazards						
New & Existing	1-10	BSD	N/A	Low	Staff Time, District Funds, FEMA Mitigation Grant Funding for 5-year update	Short-term
Action BSD-3 — Purchase generators for critical facilities and infrastructure that lack adequate backup power, including mobile generators for shelter facilities. <i>Hazards Mitigated:</i> Extreme Weather, Wildfire, Flood, Earthquake, Dam/Canal Failure, Landslide						
Existing	1, 3, 7, 10	BSD	N/A	Low	District Funds	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action BSD-4 —Partner with EMCR for disaster response and preparedness, including updates to the county EOP.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	1-10	BSD	EMCR	Low	District Funds	Ongoing
Action BSD-5 —Continue internal (staff) and external (student/family) hazard education programs.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	1, 7, 9	BSD	N/A	Low	District Funds	Ongoing
Action BSD-6 —Coordinate building EOP documents into county-wide EOP parameters.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	1-10	BSD	N/A	Low	Staff Time, District Funds	Short-term
Action BSD-7 — Support County-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	1-10	BSD	N/A	Low	Staff Time, District Funds	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 14-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	4	High	High	Yes	Yes	Yes	Medium	High
2	10	Low	Low	Yes	No	Yes	High	Low
3	4	High	Medium	Yes	Yes	No	Medium	High
4	10	Low	Low	Yes	No	Yes	High	Low
5	3	Low	Low	Yes	No	Yes	High	Low
6	10	Low	Low	Yes	No	Yes	High	Low
7	10	Low	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 14-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							Community Capacity Building ^b
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	
High-Risk Hazards								
Extreme Weather		BSD-1, 2	BSD-5, 7		BSD-3, 7			BSD-2, 4, 5, 6, 7
Medium-Risk Hazards								
Wildfire		BSD-1, 2	BSD-5, 7		BSD-3, 7			BSD-2, 4, 5, 6, 7

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
Flood		BSD-1, 2	BSD-5, 7		BSD-3, 7			BSD-2, 4, 5, 6, 7
Earthquake		BSD-1, 2	BSD-5, 7		BSD-3, 7			BSD-2, 4, 5, 6, 7
Dam/Canal Failure		BSD-1, 1	BSD-5, 7		BSD-3, 7			BSD-2, 4, 5, 6, 7
Low-Risk Hazards								
Landslide		BSD-2	BSD-5, 7		BSD-3, 7			BSD-2, 4, 5, 6, 7
Drought		BSD-2	BSD-5, 7					BSD-2, 4, 5, 6, 7
Volcano								BSD-2, 4, 5, 6, 7

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

14.9 PUBLIC OUTREACH

Table 14-14 lists public outreach activities for this jurisdiction.

Table 14-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
School Board Presentation and roundtable	9/13/21	20
School Board Presentation and roundtable	12/20/21	20
School Board Presentation and roundtable	3/14/22	20
School Board Presentation and roundtable	5/9/22	20

14.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **Boise Schools Emergency Operations Plan**—The operations plans were reviewed for the full capabilities assessment and considered in action plan development.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

15. JOINT SCHOOL DISTRICT #2

15.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Spencer McLean, Administrator Buildings and Grounds
2301 E. Lanark St.
Meridian ID, 83642
Telephone:208-350-5210
e-mail Address: mclean.spencer@westada.org

Alternate Point of Contact

TJ Evans, Assistant Administrator Buildings and Grounds
2301 E. Lanark St.
Meridian ID, 83642
Telephone:208-350-5210
e-mail Address: evans.tj@westada.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 15-1.

Table 15-1. Local Hazard Mitigation Planning Team Members

Name	Title
Spencer McLean	Administrator Buildings and Grounds
TJ Evans	Assistant Administrator Buildings and Grounds
Tom Pill	Maintenance Supervisor
Bill Woffington	Grounds Supervisor
Tawnya Harrison	Custodial Supervisor
Jacob Helderman	Project Coordinator

15.2 JURISDICTION PROFILE

15.2.1 Overview

The District was formed as a result of a reorganization plan that reduced 1,082 school districts in Idaho in 1945 to 301 districts by 1950. The District included all or part of thirty-three school districts surrounding the communities of Meridian, Boise, Eagle, Star, Garden City and surrounding rural areas located in Ada and Canyon Counties. The name of the District was changed three times since it was formed from 1950 through 1952. On July 1, 1963, the name was officially changed to Joint School District Number 2. The District has experienced rapid growth in recent years and has become the largest school district in the state of Idaho.

The District employs approximately 4,050 certified and classified staff which educates nearly 38,000 students.

The authority to govern, which resides in a five member board of trustees, has been extended to it by the state (Idaho Code 33-501). As provided by Idaho law, the board of trustees of each school district has the power to levy

taxes for school purposes. Each Idaho school district is a political subdivision of the state of Idaho. The majority of the District's funding is supplied by the State of Idaho based on Student Average Daily Attendance.

The West Ada School District assumes responsibility for the adoption of this plan; the Facilities Leadership team will oversee its implementation.

15.2.2 Service Area

Joint School District #2 consists of approximately 382 square miles and serves a population of about 38,000 students.

15.2.3 Assets

Table 15-2 summarizes the assets of the District and their value.

Asset	Value
Property	
1293 acres of land	\$22,839,552.00
Equipment	
56 Maintenance and Operations Vehicles	N/A
9 Large Tractors	N/A
8 Large Trailers	N/A
4 Food Services Vehicles	N/A
Total:	N/A
Critical Facilities	
Meridian Elementary	\$6,275,670
Mary McPherson Elementary	\$6,180,970
Star Elementary	\$4,364,013
Ustick Elementary	\$5,509,268
McMillan Elementary	\$7,239,759
Chief Joe Elementary	\$7,239,759
Lake Hazel Elementary	\$7,894,826
Pioneer Elementary	\$7,928,105
Summerwind Elementary	\$7,255,732
Christine Donnel School of the Arts	\$7,007,240
Joplin Elementary	\$5,438,956
Eagle Hills Elementary	\$5,891,319
Frontier Elementary	\$8,602,969
Linder Elementary (Barbara Morgan)	\$5,832,200
Silver Sage Elementary	\$4,896,942
Seven Oaks Elementary	\$7,492,279
Chaparral Elementary	\$7,538,969
Eliiza Hart Spalding Elementary	\$7,538,969
Cecil D. Andrus Elementary	\$7,460,852
River Valley Elementary	\$7,523,549

Asset	Value
Ponderosa Elementary	\$7,560,918
Peregrine Elementary	\$7,607,705
Discovery Elementary	\$8,125,227
Pepper Ridge Elementary	\$8,145,831
Galileo Math and Science	\$14,725,824
Hunter Elementary	\$14,005,364
Prospect Elementary	\$10,960,037
Desert Sage Elementary	\$11,774,310
Paramount Elementary	\$11,774,351
Centennial High School	\$26,920,140
Meridian High School	\$33,811,300
Hillsdale Elementary	N/A
Eagle High School	\$35,136,967
Mountain View High School	\$35,455,840
Rocky Mountain High School	\$58,130,742
Owyhee High School	N/A
Renaissance High School	\$1,800,000
Lowell Scott Middle School	\$17,487,857
Meridian Middle School	\$23,383,504
Lake Hazel Middle School	\$18,740,062
Victory Middle School	N/A
Eagle Middle School	\$17,959,832
Lewis and Clark Middle School	\$17,322,419
Sawtooth Middle School	\$18,643,661
Heritage Middle School	\$16,763,760
Crossroads Middle School	\$3,004,767
Pathways Middle School	\$1,008,719
Meridian Academy	\$3,219,956
Eagle Academy	\$4,790,969
Central Academy	\$3,401,475
Technology Charter School	\$2,131,937
Medial Arts Charter School	\$3,088,352
District Service Center	\$69,421,053
Maintenance Facility	\$2,205,650
Grounds Facility	\$1,212,829
Transportation Facility	\$4,942,400
Gravel Pit Site	N/A
Ustick/Meridian Site	N/A
Amity/Eagle Site	N/A
Keego Springs site	N/A
Total	\$707,680,000

15.3 CURRENT TRENDS

Enrollment for Joint School District No. 2 has grown by 1,500 students in the last five years. Even though economic issues have slowed housing growth. The Joint School District No. 2 is expected to grow substantially into the future. Funding continues to be a vital issue. The Joint School District No. 2 has the second lowest revenue per pupil in the United States in districts over 10,000 students.

Joint School District #2 is adding three new middle schools, 1 new elementary school and 1 new academy over the next 12 months. With the rapid building of new homes we do not foresee the expansion / addition of new buildings slowing down within the next 5 years.

Joint School District No. 2 serves the cities of Meridian, Eagle, Star, parts of Boise and Garden City plus surrounding rural areas that make up 382 square miles with varying geographical areas. Some district facilities are in areas affected by flooding, while other areas could be more susceptible to wildfire and earthquakes. Severe weather, both winter and summer could affect most facilities.

15.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 15-3.
- An assessment of fiscal capabilities is presented in Table 15-4.
- An assessment of administrative and technical capabilities is presented in Table 15-5.
- An assessment of education and outreach capabilities is presented in Table 15-6.
- Classifications under various community mitigation programs are presented in Table 15-7.

Table 15-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Joint School District No. 2 Strategic Plan		
Joint School District No. 2 Emergency Operations Plan		
Ada County Multi-Hazard Mitigation Plan	2017	Update in progress
State of Idaho Hazard Mitigation Plan	2018	
Idaho Department of Building Safety		

Table 15-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
<i>If yes, specify:</i>	
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No

Table 15-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i>	No
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i>	No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i>	No
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Facilities Department	Yes
Surveyors <i>If Yes, Department /Position:</i>	No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i>	No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i>	No
Emergency manager <i>If Yes, Department /Position:</i> Administrator Buildings and Grounds	Yes
Grant writers <i>If Yes, Department /Position:</i> Keri Davidson	Yes

Table 15-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes Gregory Wilson
Do you have personnel skilled or trained in website development?	Yes Devan Delashmutt
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i>	No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Blackboard (allows us to text / email patrons)	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No

Criterion	Response
Do you have any other programs that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i>	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 15-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	N/A	N/A	N/A
DUNS#	Yes	029604402	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	N/A	N/A	N/A
Storm Ready	N/A	N/A	N/A
Firewise	N/A	N/A	N/A

15.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

15.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Joint School District No. 2 Emergency Operations Plan**—The Emergency operations plan ties in with the Hazard Mitigation plan by cross referencing the notification processes between the two plans as well as evacuation procedures.
- **Idaho Department of Building Safety**—We are currently working with the State on implementing security procedures that will help the communication and access to real time video around our District.

15.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Joint School District No. 2 Strategic Plan**—We would like to coordinate the goals and objectives from this Multi-Hazard Mitigation Plan with our Strategic Plan as this will allow us to coordinate with all of the departments throughout the District on one plan.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

15.6 RISK ASSESSMENT

15.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 15-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 15-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	N/A	January 20, 2020 – ongoing	All in-person instruction canceled – Virtual
Flooding	N/A	March 29 – June 15, 2017	N/A
Severe Weather – Cold	N/A	1/2015	\$25,230.00
Severe Weather – Cold	N/A	12/18/2008	\$26,621.00
Severe Weather – Wind	N/A	1/4/2008	\$1,807.00
Severe Weather – Hail	N/A	4/9/2007	\$33,075.00
Severe Weather – Cold	N/A	1/20/2007	\$5,700.00
Severe Weather – Hail	N/A	7/15/2005	\$80,015.00
Wildfire – Air Quality	N/A	9/1/2000	N/A
Drought – Dry Well	N/A	10/31/1992	N/A
Earthquake	N/A	1983	N/A
Volcanic Eruption – Ash	N/A	5/22/1980	N/A

15.6.2 Hazard Risk Ranking

Table 15-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 15-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Wildfire	22	Medium
3	Flood	18	Medium
4	Dam/Canal failure	18	Medium
5	Earthquake	16	Medium
6	Drought	9	Low
7	Landslide	6	Low
8	Volcano	6	Low

15.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Sewer Lines
- Electrical Connections
- Wildland Fire- Interface schools
- Extreme Weather/Winter Storms- All schools
- Seismic- All schools
- Public Health Hazards- All schools including the staff, patrons and students are vulnerable to public health hazards. Example - COVID-19 pandemic.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

15.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 15-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 15-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
JSD2-1 —Conduct structural and nonstructural feasibility studies and retrofits of district facilities to minimize injuries and damage from flood, earthquake and severe weather. Comment: <i>The district has completed the study at 40% of our buildings, but the additional 60% need to be done.</i>			✓	JSD2-9
JSD2-2 —Install hail guards over roof top HVAC units. Comment: <i>Completed during the previous plan maintenance period.</i>	✓			
JSD2-3 —Train Maintenance staff to perform visual screening for potential seismic hazards. Comment: <i>Ongoing</i>			✓	JSD2-8
JSD2-4 —Install drainage collectors at district facilities experiencing flooding. Comment: <i>Completed during the previous plan maintenance period.</i>	✓			
JSD2-5 —Create and maintain a hazard mitigation web page on the District’s website. Comment: <i>Completed during the previous plan maintenance period.</i>	✓			
JSD2-6 —Develop and maintain a Continuity of Operations Plan (COOP) Comment: <i>Completed during the previous plan maintenance period.</i>	✓			
JSD2-7 —Continue to support the implementation, maintenance, and updating of the Ada County Hazard Mitigation Plan. Comment: <i>Supported during the previous plan period and will continue to do so.</i>			✓	JSD2-2
JSD2-8 —Partner with cities and county to provide public education and awareness of potential natural disasters in Ada County. Comment: <i>Completed during the previous plan maintenance period.</i>	✓			

15.8 HAZARD MITIGATION ACTION PLAN

Table 15-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 15-12 identifies the priority for each action. Table 15-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 15-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action JSD2-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<u>Hazards Mitigated:</u> Flood, Earthquake						
Existing	1-3,10	JSD2	N/A	High	Capital funds, HMGP, BRIC, FMA	Long term
Action JSD2-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<u>Hazards Mitigated:</u> All hazards						
New & Existing	All	JSD2	N/A	Medium	Staff Time, General Funds/Capital funds	Long term
Action JSD2-3 —Purchase generators for critical facilities and infrastructure that lack adequate backup power, including mobile generators						
<u>Hazards Mitigated:</u> Flood, Earthquake, Dam/Canal Failure, Severe Weather, Wildfire, Landslide						
Existing	1,7,10	JSD2	N/A	Low	District funds	Short term
Action JSD2-4 —Coordinate with other local school districts and other state agencies to gather information and data for emergency and disaster events readiness.						
<u>Hazards Mitigated:</u> Severe Weather, Flood						
Existing and New	1-4, 7-9	JSD2	N/A	Low	District funds	Long term
Action JSD2-5 —Increased awareness and training to all staff and personnel with educational opportunities.						
<u>Hazards Mitigated:</u> All hazards						
New and Existing	4, 7, 10	JSD2	N/A	Low	District funds	Ongoing
Action JSD2-6 —Use data to further plans of improving understanding of the location and potential impacts of the identified hazards.						
<u>Hazards Mitigated:</u> All hazards						
New and Existing	All	JSD2		Medium	District funds	Ongoing
Action JSD2-7 —Seek out more efficient and ecofriendly waste disposal in order limit the impact of discarded waste in the event of a natural disaster.						
<u>Hazards Mitigated:</u> Waste disposal, Flood, Severe Weather						
New	3, 9	JSD2	N/A	Medium	District Funds	Ongoing
Action JSD2-8 —Train Maintenance staff to perform visual screening for potential seismic hazards.						
<u>Hazards Mitigated:</u> Earthquake						
Existing	2, 10	JSD2	N/A	Low	District Funds	Ongoing
Action JSD2-9 —Conduct structural and nonstructural feasibility studies and retrofits of district facilities to minimize injuries and damage from flood, earthquake and severe weather.						
<u>Hazards Mitigated:</u> Flood, Earthquake, Severe Weather						
Existing	1, 2, 10	JSD2	N/A	Low	District Funds	Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 15-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	3	Low	Low	Yes	No	Yes	High	Low
3	3	High	Medium	Yes	Yes	No	Medium	High
4	3	Medium	Low	Yes	Yes	Yes	High	High
5	3	Medium	Low	Yes	No	Yes	Medium	Low
6	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
7	2	High	Medium	Yes	Yes	Yes	High	Low
8	2	Low	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 15-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
High-Risk Hazards								
Extreme Weather	JSD2-2, 9	JSD2-1	JSD2-5		JSD2-3, 7			JSD2-2, 4, 5, 6, 7
Medium-Risk Hazards								
Flood	JSD2-9	JSD2-1	JSD2-5		JSD2-3, 7			JSD2-2, 4, 5, 6, 7
Earthquake	JSD2-3, 9	JSD2-1, 3	JSD2-5, 8		JSD2-3			JSD2-2, 5, 6, 8
Dam/Canal Failure		JSD2-1	JSD2-5		JSD2-3			JSD2-2, 5, 6
Wildfire			JSD2-5		JSD2-3			JSD2-2, 5, 6
Low-Risk Hazards								
Drought			JSD2-5					JSD2-2, 5, 6
Landslide			JSD2-5		JSD2-3			JSD2-2, 5, 6
Volcano								JSD2-2, 5, 6

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

15.9 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.

- **Joint School District No. 2 Emergency Operations Plan**—The EOP was reviewed for the full capabilities assessment and action plan development.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

16. KUNA RURAL FIRE DISTRICT

16.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

T.J. Lawrence, Fire Chief
150 W Boise Street
Kuna, Idaho 83634
Telephone: 208-370-3127
e-mail Address: tlawrence@kunafire.com

Alternate Point of Contact

Kristal Hinkle, Officer of Administration
150 W Boise Street
Kuna, Idaho 83634
Telephone: 208-922-1144
e-mail Address: khinkle@kunafire.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 16-1.

Table 16-1. Local Hazard Mitigation Planning Team Members

Name	Title
T.J. Lawrence	Fire Chief
Kristal Hinkle	Officer of Administration

16.2 JURISDICTION PROFILE

16.2.1 Overview

Kuna Rural Fire District (KRFD) was established in 1951 and provides fire protection, rescue services and wildland fire protection. Ada County paramedics respond out of the District station and KRFD responds to EMS calls. The District is a mix of urban, rural, agriculture and wildland areas. The District provides protection services for the City of Kuna, the southern portion of Ada County, and a portion of southwest Canyon County. Kuna Fire District also provides contract services to multiple entities in the southeast portion of Ada County as well as providing mutual aid to multiple agencies countywide and statewide. A large portion of Ada County borders the southern 20 mile boundary of the Kuna Fire District, that portion of the County is very remote and considered “no man’s land” as far as Fire and EMS Services. Kuna is typically dispatched to those areas for mutual aid due to our proximity to the area.

The District is governed by a board of five elected Commissioners with one Officer of Administration, and employs a Fire Chief, and 15 fulltime Firefighter/Paramedics who respond to approximately 2,000 incidents per year. Approximately 90% of the District’s budget is generated from tax assessment and the remaining 10% from fee based services.

The Board of Commissioners assumes responsibility for the adoption of this plan; Board of Commissioners and Fire Chief will oversee its implementation.

The District participates in the Public Protection Class Rating System and currently has a rating of:

- 4 within 1,000 feet of a water connection
- 8 within five miles of the fire station
- 9 between 5 and 10 miles of the fire station
- 10 over ten miles of the fire station.

16.2.2 Service Area

The district serves a population of 33,000 as of 2021. Its service area covers an area of 110 square miles that covers the City of Kuna, the southern portion of Ada County, and part of southwest Canyon County.

16.2.3 Assets

Table 16-2 summarizes the assets of the District and their value.

Asset	Value
Property	
4 acres of land	\$900,000.00
Total:	\$900,000.00
Equipment	
Two Engines/Pumpers	\$1,160,000.00
One Tender	\$300,000.00
Two Brush Trucks	\$600,000.00
One Command Vehicle	\$75,000.00
One Squad F150	\$15,000.00
One Ford Explorer	\$8,500.00
Total:	\$2,158,000.00
Critical Facilities	
Fire Station #1	\$3,000,000.00
Total:	\$3,000,000.00

16.3 CURRENT TRENDS

The Kuna Fire District has experienced 43.4% population increase since the previous planning effort. This has resulted in an increase of 66.7% in total call volume (fire and EMS) over the past five years. The increase in call volume is due to the continued growth throughout the District, and we are expecting this trend to increase over the next five years due to the fact we are the second fastest growing area in the State of Idaho.

16.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 16-3.
- An assessment of fiscal capabilities is presented in Table 16-4.
- An assessment of administrative and technical capabilities is presented in Table 16-5.
- An assessment of education and outreach capabilities is presented in Table 16-6.
- Classifications under various community mitigation programs are presented in Table 16-7.

Table 16-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Idaho State Code—Title 31	Varies	
National Fire Protection Association Codes	Varies	
Kuna Rural Fire District Policy Code		
The District must adhere to all applicable codes and regulations enforced by Federal, State and Local authorities that influence the District service area.	Varies	
International Wildland Urban Interface Code	2021	
Ada/Canyon Hazard Mitigation Plan	2017	Update in progress
City of Kuna Ordinance and Comprehensive Plan	2015	
Williams Northwest Pipeline (Natural Gas) Public Safety Response Manual		
Intermountain Gas Safety Response Manual		

Table 16-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	No
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service	No
<i>If yes, specify:</i>	
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 16-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i>	No
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i>	No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i>	No
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Officer of Administration	Yes
Surveyors <i>If Yes, Department /Position:</i>	No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i>	No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i>	No
Emergency manager <i>If Yes, Department /Position:</i> Chief	Yes
Grant writers <i>If Yes, Department /Position:</i> Chief	Yes

Table 16-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes. Fire Chief
Do you have personnel skilled or trained in website development?	Yes. Officer of Administration
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i>	No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Facebook	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i>	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 16-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	N/A	N/A	N/A
DUNS#	Yes	028600419	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	Yes	4/8/9/10	2012 (in process of reclassification)
Storm Ready	N/A	N/A	N/A
Firewise	N/A	N/A	N/A

16.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

16.5.1 Existing Integration

Existing integration has not been identified as established between local hazard mitigation planning and other local plans and programs, but opportunities exist for future integration as described below.

16.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Community Wildfire Protection Plan**—A countywide Community Wildfire Protection Plan is in development and will use data and mapping from this hazard mitigation plan.
- **Kuna Rural Fire District Policy Code** —Updates to the District Policy Code will integrate hazard mapping from this hazard mitigation plan for flood and wildfire hazard area as applicable.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

16.6 RISK ASSESSMENT

16.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 16-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 16-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	January 20, 2020 and continuing	\$3,000
Severe Storm/Thunder Storm—Wind	N/A	08/22/2010	\$15,000
Wind	N/A	03/29/2009	\$6,666
Flood	N/A	06/04/2006	\$750,000
Severe Storm/Thunder Storm—Wind	N/A	07/25/2002	N/A
Severe Storm/Thunder Storm—Wind	N/A	01/16/1999	\$1,000

Type of Event	FEMA Disaster #	Date	Damage Assessment
Severe Storm/Thunder Storm—Wind	N/A	09/07/1998	\$4,000
Lightning	N/A	09/07/1998	\$2,000
Severe Storm/Thunder Storm—Wind	N/A	09/06/1998	\$1,600
Hail—Severe Storm/Thunder Storm—Wind	N/A	04/23/1998	\$4,000
Hazardous Spill/Fire	N/A	1997	N/A
Wind	N/A	09/17/1997	\$400
Lightning/Wild Fire	N/A	07/30/1996	N/A
Lightning/Wild Fire	N/A	1996	N/A
Lightning/Wild Fire	N/A	07/28/1995	\$800,000

16.6.2 Hazard Risk Ranking

Table 16-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings. Rankings are based on the risk assessment for the City of Kuna, local knowledge, and understanding of the hazard events.

Table 16-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Wildfire	33	High
2	Extreme Weather	33	High
3	Flood	18	Medium
4	Earthquake	16	Medium
5	Drought	16	Medium
6	Volcano	6	Low
7	Dam/Canal Failure	0	Low
8	Landslide	0	Low

16.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- The large size of the district service area does not allow for a quick response time to all areas of the district. Overlapping calls and lengthy drive times interfere with rapid response to some areas. If the district had another station to dispatch 911 response from, it would be able to service outlying areas more quickly.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

16.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 16-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 16-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action KFD-1 —Support County-wide initiatives identified in Volume 1 <i>Comment: Ongoing</i>			✓	KFD-3
Action KFD12 —Continue to support the implementation, monitoring, maintenance, and updating of the Plan, as defined in Volume 1. <i>Comment: Ongoing</i>			✓	KFD-2
Action KFD-3 —Comply with all applicable building and fire codes, as well as other regulations when constructing or significantly remodeling infrastructure facilities. <i>Comment: Ongoing, enforced by adopted codes</i>			✓	KFD-4
Action KFD-4 —Ensure a reliable source of water for fire suppression (meeting acceptable standards for minimum volume and duration of flow) for existing and new development. <i>Comment: Ongoing, enforced by adopted code</i>			✓	KFD-5
Action KFD-5 —Develop and maintain a coordinated approach between fire jurisdictions and water supply agencies to identify needed improvements to the water distribution system, initially focusing on areas of highest wildfire hazard. <i>Comment: Ongoing</i>			✓	KFD-6
Action KFD-6 —Ensure all dead-end segments of public roads in high hazard areas have at least a “T” intersection turn-around sufficient for typical wildland fire equipment. <i>Comment: Ongoing, enforced by adopted code</i>			✓	KFD-7
Action KFD-7 —Require that development in high fire hazard areas provide adequate access roads, onsite fire protection systems, evacuation signage and fire breaks <i>Comment: Ongoing process</i>			✓	KFD-8
Action KFD-8 —Ensure adequate fire equipment roads or fire road access to developed and open space areas. <i>Comment: Ongoing</i>			✓	KFD-9
Action KFD-9 —Construct a Railroad overpass to access south side of Kuna for emergency access and evacuation routes. Approx. 70 trains pass through and often block access to large portion of the District. <i>Comment: The City of Kuna is doing a feasibility study. Removed since the project is not under district authority.</i>		✓		
Action KFD-10 —Evacuation routes, map and mark evacuation options from southern portion of District. Provide public education in regards to evacuations. <i>Comment: No longer needed. Multiple accessible roadways and options for evacuation are available.</i>		✓		
Action KFD-11 —Increase communication capabilities between agencies, coordination of radio types and use of existing and new systems. <i>Comment: Vehicle radios are being updated gradually, but additional ones need update.</i>			✓	KFD-10

16.8 HAZARD MITIGATION ACTION PLAN

Table 16-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 16-12 identifies the priority for each action. Table 16-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 16-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action KFD-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide						
Existing	1, 2, 3	KRFD	N/A	High	HMGP, BRIC, FMA	Short-term
Action KFD-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Drought, Dam/Canal Failure, Landslide, Volcano						
New & Existing	1, 2, 6, 7, 8, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Short-term
Action KFD-3 — Support County-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Drought, Dam/Canal Failure, Landslide, Volcano						
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Short-term
Action KFD-4 — Comply with all applicable building and fire codes, as well as other regulations when constructing or significantly remodeling infrastructure facilities.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Drought, Dam/Canal Failure, Landslide						
New & Existing	3, 4, 5	KRFD	N/A	Low	Staff Time, General Funds	Ongoing
Action KFD-5 — Ensure a reliable source of water for fire suppression (meeting acceptable standards for minimum volume and duration of flow) for existing and new development.						
<i>Hazards Mitigated:</i> Wildfire, Drought						
New & Existing	1, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Ongoing
Action KFD-6 — Develop and maintain a coordinated approach between fire jurisdictions and water supply agencies to identify needed improvements to the water distribution system, initially focusing on areas of highest wildfire hazard.						
<i>Hazards Mitigated:</i> Wildfire, Drought						
New & Existing	1, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Ongoing
Action KFD-7 — Ensure all dead-end segments of public roads in high hazard areas have at least a “T” intersection turn-around sufficient for typical wildland fire equipment.						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	1, 5, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Ongoing
Action KFD-8 — Require that development in high fire hazard areas provide adequate access roads, onsite fire protection systems, evacuation signage and fire breaks						
<i>Hazards Mitigated:</i> Wildfire						
New	1, 4, 5, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Ongoing
Action KFD-9 — Ensure adequate fire equipment roads or fire road access to developed and open space areas.						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	1, 9, 10	KRFD	N/A	Low	Staff Time, General Funds	Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action KFD-10 — Increase communication capabilities between agencies, coordination of radio types and use of existing and new systems.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Volcano						
New & Existing	7, 9	KRFD	N/A	Low	Staff Time, General Funds	Ongoing
Action KFD-11 — Add hazard mitigation information to the District website, including tips for residents to create defensible space around their homes.						
<i>Hazards Mitigated:</i> Wildfire						
New & Existing	2, 8	KRFD	N/A	Low	Staff Time, General Funds	Short-term
Action KFD-12 — Engage in a feasibility study to determine potential location and benefits of building a new station to serve outlying areas.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide						
New & Existing	2, 10	KRFD	N/A	Low	HMGP, BRIC	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 16-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Low	Low	Yes	No	Yes	High	Low
3	10	Low	Low	Yes	No	Yes	High	Low
4	3	Medium	Low	Yes	No	Yes	High	Low
5	3	Medium	Low	Yes	No	Yes	High	Low
6	3	Medium	Low	Yes	No	Yes	High	Low
7	4	Medium	Low	Yes	No	Yes	High	Low
8	5	Medium	Low	Yes	No	Yes	High	Low
9	3	Medium	Low	Yes	No	Yes	High	Low
10	2	Medium	Low	Yes	No	Yes	High	Low
11	2	Low	Low	Yes	No	Yes	High	Low
12	2	Low	High	No	Yes	No	Low	Medium

a. See the introduction to this volume for explanation of priorities.

Table 16-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
High-Risk Hazards								
Wildfire	KFD-4, 8, 9	KFD-1, 5	KFD-11		KFD-10			KFD-2, 3, 6, 7, 12
Extreme Weather	KFD-4	KFD-1			KFD-10			KFD-2, 3, 12
Medium-Risk Hazards								
Flood	KFD-4	KFD-1			KFD-10			KFD-2, 3, 12
Earthquake	KFD-4	KFD-1			KFD-10			KFD-2, 3, 12
Drought	KFD-4	KFD-5						KFD-2, 3, 6
Low-Risk Hazards								
Dam/Canal Failure	KFD-4	KFD-1			KFD-10			KFD-2, 3, 12
Landslide	KFD-4	KFD-1			KFD-10			KFD-2, 3, 12
Volcano								KFD-2, 3, 10

- a. See the introduction to this volume for explanation of mitigation types.
- b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

16.9 PUBLIC OUTREACH

Table 16-14 lists public outreach activities for this jurisdiction.

Table 16-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Elementary School Public Safety	October each year	Several hundred
Career Day and Classes for Mock Interviews	October each year	200

16.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed.
- **Kuna Rural Fire District Insurance Records**—Insurance records were reviewed to determine asset values
- **Kuna Rural Fire District Website**—The website was used in the capability assessment and action plan development.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

17. MERIDIAN DEVELOPMENT CORPORATION

17.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Ashley Squyres, Administrator
Mailing Address: 104 East Fairview Ave, #239
Meridian, ID 83642
Telephone: 208-830-7786
e-mail: meridiandevelopmentcorp@gmail.com

Alternate Point of Contact

Dave Winder, Board Chairman
Mailing Address: 104 East Fairview Ave, #239
Meridian, ID 83642
Telephone: 208-866-0610
e-mail: dave.winder@paccra.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 17-1.

Table 17-1. Local Hazard Mitigation Planning Team Members

Name	Title
Ashley Squyres	Administrator

17.2 JURISDICTION PROFILE

17.2.1 Overview

The Meridian Development Corporation (MDC) was established by Resolution No. 01-367 of the City Council of the City of Meridian, Idaho adopted July 24, 2001 to function as the City’s urban renewal agency. It is an independent agency, authorized under the authority of the Idaho Urban Renewal Law of 1965, as amended, Chapter 20, Title 50, Idaho Code.

The Meridian Development Corporation is committed to the economic stimulation and expansion of Downtown Meridian into a thriving area that provides opportunities in which to live, work, and play. Renewal and redevelopment will be supported through strategic use of resources to create successful projects that will attract and serve the people of Meridian.

The Meridian City Council created the agency and appointed nine Commissioners for rotating three-year terms. MDC has its own guiding documents, budget, and board.

The Meridian Development Corporation board assumes responsibility for the adoption of this plan; the City of Meridian will oversee its implementation.

- Funding sources: Tax Increment Financing

17.2.2 Service Area

The District service area is all located within the City of Meridian city limits. It includes several tax increment financing (TIF) districts.

The District takes in about 34 square miles and serves a population of 127,890.

17.2.3 Assets

The District does not own property, equipment, or critical facilities.

17.3 CURRENT TRENDS

At this time, each of our TIF districts are redeveloping and growing. This includes our Downtown District and our Ten Mile District along with sub-districts located in Downtown.

17.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 17-2.
- An assessment of fiscal capabilities is presented in Table 17-3.
- An assessment of administrative and technical capabilities is presented in Table 17-4.
- An assessment of education and outreach capabilities is presented in Table 17-5.
- Classifications under various community mitigation programs are presented in Table 17-6.

Table 17-2. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Destination Downtown Master Plan		City of Meridian and MDC
Downtown Meridian Transportation Management Plan	2005	City of Meridian and MDC
City of Meridian Downtown Streetscape Design Guidelines	2007	City of Meridian and MDC
Downtown Marketing Strategy	2004	MDC
Ten Mile District Plan	2016	City of Meridian and MDC

Table 17-3. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes, through TIF financing
Authority to Levy Taxes for Specific Purposes	This is what TIF financing is for - urban renewal
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Available, but the board chooses not to bond.
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Other	No

If yes, specify:

Table 17-4. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Engineers or professionals trained in building or infrastructure construction practices	No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Surveyors	No
Personnel skilled or trained in GIS applications	No
Scientist familiar with natural hazards in local area	No
Emergency manager	No
Grant writers <i>If Yes, Department /Position:</i> Ashley Squyres	Yes
Other <i>If Yes, Department /Position:</i>	No

Table 17-5. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website?	No
Do you use social media for hazard mitigation education and outreach?	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information?	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i>	No

Table 17-6. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	N/A	N/A	N/A
DUNS#	Yes	808762434	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	No	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

17.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

17.5.1 Existing Integration

There is currently no existing integration between local hazard mitigation planning and district plans and programs.

17.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Destination Downtown Master Plan**—may include hazard mitigation plan hazard mapping when looking at future development
- **Ten Mile District Plan**—may include hazard mitigation plan hazard mapping when looking at future development

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

17.6 RISK ASSESSMENT

17.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 17-7 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 17-7. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Thunderstorm/Microburst	N/A	6/22/2021	Tree broken in half due to thunderstorm outflow winds. Estimated 60MPH wind gusts
Cloudburst Rain Event	N/A	Sept 2013	Unknown
Cloudburst Rain Events	N/A	Aug 2010	Unknown
Wildfires	N/A	Sept 2000	Unknown
Rain & Flooding	N/A	Dec 1964	Unknown

17.6.2 Hazard Risk Ranking

Table 17-8 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 17-8. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Extreme Weather	33	High
2	Flood	18	Medium
3	Earthquake	16	Medium
4	Drought	9	Low
5	Dam/Canal Failure	6	Low
6	Landslide	6	Low
7	Volcano	6	Low
8	Wildfire	0	Low

17.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. No additional jurisdiction-specific issues have been identified after a review of the results of the risk assessment, public involvement strategy, and other available resources.

17.7 HAZARD MITIGATION ACTION PLAN

Table 17-9 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 17-10 identifies the priority for each action. Table 17-11 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 17-9. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action MDC-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide						
Existing	3, 8, 9	City of Meridian	MDC	High	HMGP, BRIC, FMA	Short-term
Action MDC-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought, Volcano						
New & Existing	All	MDC		Low	Staff Time, General Funds	Short-term
Action MDC-3 — Support county-wide initiatives identified in Volume 1.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide, Drought, Volcano						
Existing	All	MDC		Low	Staff Time, General Funds	Short-term
Action MDC-4 — Integrate Hazard Mitigation Plan hazard mapping into district plan updates, as applicable.						
<i>Hazards Mitigated:</i> Wildfire, Extreme Weather, Flood, Earthquake, Dam/Canal Failure, Landslide						
New & Existing	1, 2, 6	MDC		Low	Staff Time, General Funds	Short-term
Action MDC-5 — Construct Ninemile Creek Flood Mitigation Project as designed to eliminate flood risk to people, property and critical lifelines. The proposed improvements include constructing storm drain infrastructure and pipeline from Story Park to the outlet into the existing Ninemile Creek Channel north of the Union Pacific Railroad tracks. (Coordinates with the City of Meridian Action M-13.)						
<i>Hazards Mitigated:</i> Flood						
New & Existing	1, 3, 9, 10	MDC	City of Meridian	\$4.5 Million	HMGP, BRIC, MDC, FMA	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 17-10. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	10	Low	Low	Yes	No	Yes	High	Low
3	10	Low	Low	Yes	No	Yes	High	Low
4	3	Low	Low	Yes	No	Yes	High	Low
5	4	High	Medium	Yes	Yes	No	Medium	High

a. See the introduction to this volume for explanation of priorities.

Table 17-11. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Medium-Risk Hazards								
Extreme Weather		MDC-1						MDC-2, 3, 4
Flood		MDC-1				MDC-5		MDC-2, 3, 4
Earthquake		MDC-1						MDC-2, 3, 4
Low-Risk Hazards								
Drought								MDC-2, 3
Dam/Canal Failure		MDC-1						MDC-2, 3, 4
Landslide		MDC-1						MDC-2, 3, 4
Wildfire		MDC-1						MDC-2, 3, 4
Volcano								MDC-2, 3

- a. See the introduction to this volume for explanation of mitigation types.
- b. Based on current community capacity, this jurisdiction did not identify a need for expansion of education and outreach or administrative and technical capabilities. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

17.8 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **Destination Downtown Master Plan**—The Master Plan was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Downtown Meridian Transportation Management Plan**— Reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of Meridian Downtown Streetscape Design Guidelines**— Reviewed for the full capability assessment.
- **Downtown Marketing Strategy**— Reviewed for the full capability assessment.
- **Ten Mile District Plan**— Reviewed for the full capability assessment.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

18. NORTH ADA COUNTY FIRE & RESCUE DISTRICT

18.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Shelley Young, Fire District Administrator
5800 Glenwood Street
Garden City, ID 83714
Telephone: 208-375-0906
e-mail Address: shelley@nacfire.org

Alternate Point of Contact

Jeff Ramey, Commissioner/Chairman
5800 Glenwood Street
Garden City, ID 83714
Telephone: 208-375-0906
e-mail Address: chiefncathy@gmail.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 18-1.

Table 18-1. Local Hazard Mitigation Planning Team Members

Name	Title
Shelley Young	Fire District Administrator

18.2 JURISDICTION PROFILE

18.2.1 Overview

The North Ada County Fire & Rescue (NACFR) District is the result of the 1960s-era merger of Cole Fire District and Collister Fire District. A three-member elected board of officials governs NACFR. The Board assumes responsibility for adoption of this plan.

NACFR is funded by a levy on property values within the District. NACFR covers 34 square miles, with a roughly equal mix of urban commercial and suburban and rural residential areas and serves a population of approximately 24,500. The largest percentage of the population is located in the City of Garden City. The hazard environment is notable for a substantial hazardous materials presence in the commercial area, a large swath of urban interface in the Boise foothills and along the Boise River, and the presence of the Boise River itself. Station 16 has one of the highest run volumes of any fire station in the State of Idaho.

NACFR owns three fire stations: two within the city limits of Garden City (Stations 16 and 18), and one in Hidden Springs (formerly Station 20), located in the foothills north of Boise. As of June 15, 2022, the Hidden Springs Station (now Eagle Fire Station 5) has a full time staff and response due to a contract for service with the Eagle Fire District. To date, funding has not been available to allow NACFR to staff Station 18 for structural fire and emergency medical response. Ada County Paramedics does staff Station 18 on a part-time basis.

In 2009 NACFR signed a Joint Powers Agreement with Boise City Fire Department to provide staffing and oversee Operations for NACFR. In 2021 NACFR signed an additional Joint Powers Agreement with Eagle Fire Department to provide staffing and oversee operations for NACFR in a portion of the NACFR geographical area located near what is now Eagle Fire Station 5 and within the area of unincorporated Ada County.

The North Ada County Fire & Rescue Board of Commissioners assumes responsibility for the adoption of this plan; North Ada County Fire & Rescue District will oversee its implementation.

The District participates in the Public Protection Class Rating System and currently has a rating of 3 within City limits and 3W in areas of unincorporated Ada County located within district boundaries (subdistrict #1) where a water system and hydrants are present.

The district serves a population of 24,500 as of April 2022. Its service area covers an area of 34 square miles, which has a total potential taxable value of \$3.7 billion dollars.

18.2.2 Assets

Table 18-2 summarizes the assets of the District and their value.

Asset	Value
Property	
1 acre of land	\$50,000
Equipment	
2017 Pierce Engine Arrow XT	\$650,000
2004 Pierce Enforcer	\$250,000
2004 Pierce Enforcer	\$150,000
2003 Pierce Water Tender	\$100,000
2005 GMC 5500 Brush Truck	\$100,000
2005 GMC 5500 Brush Truck	\$100,000
2008 Kawasaki Mule UTV	\$8,000
Total:	\$1,308,000
Critical Facilities	
Fire Station 16	\$1,500,000
Fire Station 18	\$3,000,000
Fire Station 20	\$2,000,000
Total:	\$6,500,000

18.3 CURRENT TRENDS

Due to reductions in revenue, in 2010, NACFR was forced to close one of its two Garden City Fire Stations. The entire State of Idaho is experiencing unprecedented growth, and the NACFR district, including the Boise River corridor, is growing exponentially. NACFR currently staffs Station 16 in Garden City with a BLS Engine Company and Station 5 located to the North with a BLS Engine Company. Station 5 responds in a rural area experiencing record residential growth.

In the longer term, local land use designations allow for an increase in light commercial and residential land uses within the service area. In FY2021 developers began building multi-story structures along the Boise River Corridor, and for the first time the NACFR district will include buildings of more than 5 stories with an 18-story condominium and commercial use structure planned within the next 3 years. This increase may result in an increase in hazards and will expose a larger, more densely configured population to them. This will also result in a projected increase in call volume.

18.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 18-3.
- An assessment of fiscal capabilities is presented in Table 18-4.
- An assessment of administrative and technical capabilities is presented in Table 18-5.
- An assessment of education and outreach capabilities is presented in Table 18-6.
- Classifications under various community mitigation programs are presented in Table 18-7.

Table 18-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Idaho Code	2021	Annually based on legislature
Idaho Emergency Operations Plan	2019	
Idaho State Hazard Mitigation Plan	2018	
Ada County Flood Plan	2018	
Ada County Hazmat Plan	2018	
Ada County Wildfire Response Plan	2018	
Ada County Mass Casualty Incident Plan	N/A	
Ada County Multi-Hazard Mitigation Plan	2017	
Ada County Wildland-Urban Interface Wildfire Mitigation Plan	N/A	
City of Garden City Evacuation Plan	N/A	
City of Garden City Code 4-13-1	N/A	
City of Garden City Code 8-3	N/A	
NACFR Resolutions	2021	Annually based on need
NACFR Strategic Plan	2018	
Boise City Fire Department Standard of Cover-2021	2021	
National Fire Protection Association Standards and Recommended Practices (various)	N/A	
Eagle Fire Department Standard of Cover		

Table 18-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	No
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 18-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Contract Support	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Contract Support	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Contract Support	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Contract Support	Yes
Surveyors	No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Contract Support	Yes
Scientist familiar with natural hazards in local area	No
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management; Contract Support – City Boise (Fire) Emergency Management;	Yes
Grant writers <i>If Yes, Department /Position:</i> Contract Support	Yes

Table 18-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes. Contract Support
Do you have personnel skilled or trained in website development?	Yes. Contract Support
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Link to ACEMHMP	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Social media outreach program with accounts on both Facebook and Twitter	Yes. Contract Support
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Hidden Springs HOA	Yes

Criterion	Response
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Website-currently not utilized	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 18-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS#	Yes	118061687	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	Yes	3	2013
Storm Ready	Yes	N/A	N/A
Firewise	Yes	N/A	N/A

18.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for future integration. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

18.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Firewise Communities**—The Firewise program encourages homeowners (in this case the Hidden Springs HOA) to prepare for wildland/urban interface fires.

18.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Firewise Communities**-The District will soon undertake a strategic planning effort to assess the impact of projected growth in the foothills on fire and EMS services. The Firewise process may provide input to the strategic planning process.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

18.6 RISK ASSESSMENT

18.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 18-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 18-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Goose Fire	N/A	10/6/2020	441 acres burned, numerous evacuations
COVID-19 Pandemic	DR-4534	1/20/2020-Ongoing	N/A
Flooding	DR-4342	3/29/2017	Public Assistance County-wide: \$4,493,792
Winter Storms	N/A	December 2016	Extreme snowfall impacted services
Highway 16 Fire	N/A	2010	5 homes lost
McFarland Fire	N/A	2008	N/A
Oregon Trail Fire	N/A	2008	18 homes lost; 1 human life lost
Wildfires	DR-1341	2000	N/A
Foothills flooding	N/A	1959, 1969, 1979, 1982, 1986, 1997	In 1969 approximately 500 houses damaged by flash flooding and landslides.
Boise River floods	N/A	1936, 1938, 1943, (Boise River flood control dams built late 40s-50s) 1963, 1964, 1965, 1983, 1993, 1997, 1998	N/A
Challis Earthquake	N/A	1983	N/A
Mt. St. Helens eruption	N/A	1980	N/A

18.6.2 Hazard Risk Ranking

Table 18-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 18-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	48	High
2	Severe Weather	33	High
3	Wildfire	18	Medium
4	Earthquake	16	Medium
5	Dam/Canal Failure	12	Low
6	Drought	9	Low
7	Volcano	6	Low
8	Landslide	3	Low

18.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Fire Station located in the flood plain.
- Isolated development in the foothills exposed to urban interface wildfires, with limited access and extended response times.
- Fire Stations need retrofitting for earthquakes

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

18.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 18-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 18-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action NACFR-1 —Develop consistent standards for development in high-risk/underserved areas <i>Comment: Removed as written, but reworded to be more specific in action plan update, as NACFR-3</i>		✓		
Action NACFR-2 —Conduct wildland-urban interface GIS-based hazard assessment <i>Comment: Ongoing capability.</i>			✓	NACFR-5
Action NACFR-3 —Perform Earthquake Retrofitting of Fire Stations 16, 18, 20 <i>Comment: No progress</i>			✓	NACFR-6
Action NACFR 4 —Continue Firewise Community program for residents in the foothills <i>Comment: Ongoing capability; this is currently done on behalf of NACFR by Boise Fire Department.</i>			✓	NACFR-4
Action NACFR-5 —Conduct Location/Construction Study for new Flood/Earthquake resistant Fire Station to replace Station 16 <i>Comment: No progress</i>			✓	NACFR-7
Action NACFR-6 —Construct new flood/earthquake resistant fire station <i>Comment: No progress</i>			✓	NACFR-8
Action NACFR-7 —Campaign to get neighborhoods to revise covenants and homeowners' association (HOA) rules to mitigate natural hazards. <i>Comment: WUI/Firewise education programs ongoing, other hazards currently not being addressed;</i>			✓	NACFR-9
Action NACFR-8 —Modify NACFR web-site to include links to hazard mitigation and preparedness sites. <i>Comment: Ongoing capability</i>			✓	NACFR-10
Action NACFR-9 —Establish Strategic Planning process for foothills <i>Comment: Ongoing capability</i>			✓	NACFR-11

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action NACFR-10 —Develop/enhance ability to capture perishable data, including dollar values, after significant events <i>Comment: No progress</i>			✓	NACFR-12
Action NACFR-11 —Actively participate in Plan maintenance protocols as defined in Volume 1 of the Multi-Hazard Mitigation Plan. <i>Comment: Ongoing capability</i>			✓	NACFR-2
Action NACFR-12 —Support the county-wide initiatives identified in Volume 1 of the Multi-Hazard Mitigation Plan. <i>Comment: Ongoing capability</i>			✓	NACFR-13
Action NACFR-13 —Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach. <i>Comment: Ongoing capability</i>			✓	NACFR-14
Action NACFR-14 —Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation projects. <i>Comment: Ongoing capability. This is currently done on behalf of NACFR by Boise Fire Department.</i>			✓	NACFR-15

18.8 HAZARD MITIGATION ACTION PLAN

Table 18-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 18-12 identifies the priority for each action. Table 18-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 18-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action NACFR-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. <i>Hazards Mitigated:</i> Flood						
Existing	2, 3	NACFR	N/A	High	HMGP, BRIC, FMA	Short-term
Action NACFR-2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. <i>Hazards Mitigated:</i> All						
New & Existing	All	NACFR	N/A	Low	Staff Time, General Funds	Short-term
Action NACFR-3— Update, adopt, and enforce a new Wildland Urban Interface (WUI) Code to replace the existing code. Improve and update existing WUI hazard zones. (Coordinates with City of Boise Action B-11, Whitney Fire Protection District Action WFD-3) <i>Hazards Mitigated:</i> Wildfire						
New & Existing	1, 2, 4, 5, 6, 9, 10	Boise Fire Department	NACFR, Whitney Fire	Low	Local	Short-Term
Action NACFR-4— Continue Firewise Community program for residents in the foothills and promote adoption of Firewise for development within the wildland urban interface overlay. (Coordinates with City of Boise Action B-21, Whitney Fire Protection District WFD-5) <i>Hazards Mitigated:</i> Wildfire						
New and Existing	1, 2, 5, 6, 8, 9	Boise Fire Department	NACFR, Whitney Fire	Low	Local funds	Short-term and ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action NACFR-5— Complete a Wildland-Urban Interface (WUI) risk assessment (a GIS exercise looking at vegetation in the undeveloped area, age of homes and other relevant factors). Improve individual parcel data with wildfire assessments. Provide a public portal to share data and educate on risk and community wildfire adaptation. (Coordinates with City of Boise Action B-7 and Whitney Fire)						
<u>Hazards Mitigated:</u> Wildfire						
New and Existing	2, 4, 6, 8, 9, 10	Boise Fire Department	NACFR	Medium	Western States Grant, HMGP Grant, Local	Short-term and ongoing
Action NACFR-6— Perform Earthquake Retrofitting of Fire Stations 16, 18, 20						
<u>Hazards Mitigated:</u> Earthquake						
Existing	1, 2, 3, 10	NACFR	N/A	High	BRIC, NACFR	Long-Term
Action NACFR-7— Conduct Location/Construction Study for new Flood/Earthquake resistant Fire Station to replace Station 16						
<u>Hazards Mitigated:</u> Flood, Earthquake						
Existing	1, 2, 3, 10	NACFR	N/A	High	BRIC, NACFR	Long-Term
Action NACFR-8— Construct new flood/earthquake resistant fire station						
<u>Hazards Mitigated:</u> Flood, Earthquake						
New	1, 2, 3, 10	NACFR	N/A	HIGH	BRIC, NACFR	Long-Term
Action NACFR-9— Campaign to get neighborhoods to revise covenants and homeowners' association (HOA) rules to mitigate natural hazards. (Coordinates with City of Boise Action B-22)						
<u>Hazards Mitigated:</u> Flood, Earthquake, Wildfire						
New and Existing	2, 5, 6, 8, 9	Boise Fire Department	NACFR	Low	Staff Time, General Fund	Short-term
Action NACFR-10— Modify NACFR website to include links to hazard mitigation and preparedness sites.						
<u>Hazards Mitigated:</u> All						
Existing	8	NACFR	N/A	Low	NACFR Staff Time	Short/Ongoing
Action NACFR-11— Establish Strategic Planning process for foothills. (Coordinates with City of Boise Action B-23, Eagle Fire Protection District Action EFD-12)						
<u>Hazards Mitigated:</u> Wildfire						
Existing	2, 3, 4, 5, 6, 9	Boise Fire Department	Eagle Fire Protection, NACFR	Medium	Rural Fire Assistance Grant, National Fire Plan	Long-term/Ongoing
Action NACFR-12— Develop/enhance ability to capture perishable data, including dollar values, after significant events. (Coordinates with City of Boise Action B-24)						
<u>Hazards Mitigated:</u> All						
Existing	2	Boise Fire Department	NACFR	Low	Local Funds	Ongoing
Action NACFR-13— Support the county-wide initiatives identified in Volume 1 of the Multi-Hazard Mitigation Plan.						
<u>Hazards Mitigated:</u> All						
New and Existing	All	NACFR	N/A	Low	NACFR	Short-Term/Ongoing
Action NACFR-14— Conduct wildland fire prevention education and outreach via the internet, social media and direct public outreach to support and promote fire adapted communities. Focus on fuel reduction on private property around new and existing homes via incentivizing homeowners, providing free debris pick-up and replacement Firewise vegetation at a discount. (Coordinates with City of Boise Action B-8, Whitney Fire Protection District Action WFD-7)						
<u>Hazards Mitigated:</u> Wildfire						
New and Existing	1, 8, 9, 10	Boise Fire Department	NACFR, Whitney Fire	Low	Western State Grant, Local	Short-term and Ongoing

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action NACFR-15— Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation and fuel-reduction projects, including prescribed fire (Rx fire), pile-burning and managed fire. Increase capacity to conduct these projects through hiring personnel and expenditures for equipment and biological control methods. (Coordinates with City of Boise Action B-15, Flood Control District #10 Action FCD10-12, Whitney Fire Protection District WFD-8)						
<i>Hazards Mitigated:</i> Wildfire						
New and Existing	1, 6, 9, 10	Boise Fire Department	FCD #10, NACFR, Whitney Fire	Low	Staff time; general fund	Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 18-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	2	High	High	Yes	Yes	No	Medium	High
2	10	Low	Low	Yes	Yes	Yes	High	Low
3	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
4	6	High	Low	Yes	Yes	Yes	High	High
5	6	High	Medium	Yes	Yes	Yes	Medium	Medium
6	4	High	High	Yes	Yes	No	Medium	High
7	4	Medium	High	Yes	Yes	No	Medium	Medium
8	4	High	High	Yes	Yes	No	Medium	High
9	5	High	Low	Yes	Yes	Yes	Medium	Medium
10	1	Medium	Low	Yes	Yes	Yes	High	Medium
11	6	Medium	Medium	Yes	Yes	Yes	High	High
12	1	Low	Low	Yes	Yes	Yes	Medium	Medium
13	10	Medium	Low	Yes	Yes	Yes	Medium	Medium
14	2	Medium	Low	Yes	No	Yes	High	Low
15	4	High	Low	Yes	No	Yes	High	Low

a. See the introduction to this volume for explanation of priorities.

Table 1813. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							Community Capacity Building ^b
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	
High-Risk Hazards								
Flood	NACFR-2, 3, 9	NACFR-1, 6, 7, 8	NACFR-9, 10, 13					NACFR-3, 9, 12
Severe Weather	NACFR-2, 3		NACFR-10, 13					NACFR-3, 12

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
Medium-Risk Hazards								
Wildfire	NACFR-2, 3, 4, 9, 11	NACFR-4, 3, 14, 15	NACFR-4, 5, 3, 9, 10, 13, 14, 15	NACFR-14, 15	NACFR-11, 15			NACFR-3, 4, 5, 9, 11, 12, 14, 15
Earthquake	NACFR-2, 3, 5, 9	NACFR-6, 7, 8	NACFR-5, 9, 10, 13					NACFR-3, 9, 12
Low-Risk Hazards								
Dam Failure	NACFR-2, 3		NACFR-10, 13					NACFR-12
Landslide	NACFR-2, 3		NACFR-10, 13					NACFR-3, 12
Drought	NACFR-2, 3		NACFR-10, 13					NACFR-3, 12
Volcano								NACFR-12

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

18.9 PUBLIC OUTREACH

Table 18-14 lists public outreach activities for this jurisdiction.

Table 18-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Accomplished through a JPA with Boise City Fire Department	Continuously	N/A
Accomplished through a JPA with Eagle Fire District	Continuously	N/A

18.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **2018 North Ada County Fire & Rescue District Strategic Plan** – This document is driving actions identified in the Ada County Multi-Hazard Mitigation Plan.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

19. STAR JOINT FIRE PROTECTION DISTRICT

19.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Greg Timinsky Fire Chief
11665 W State St
Star, ID 83669
Telephone: 208.286.7772
e-mail Address: gtiminsky@starfirerescue.org

Alternate Point of Contact

Robin Ward
11665 W State St
Star, ID 83669
Telephone: 208.286.7772
e-mail Address: rward@starfirerescue.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 19-1.

Table 19-1. Local Hazard Mitigation Planning Team Members

Name	Title
Greg Timinsky	Fire Chief

19.2 JURISDICTION PROFILE

19.2.1 Overview

The Star Joint Fire Protection District (SFD) was established in 1953 and is comprised of 55 square miles of protection area that falls within the counties of Ada & Canyon. The fire department was originally started because there was no fire protection for this area. Some local farmers and residents pulled together to organize an all-volunteer fire department and purchased an engine. As years went on the fire department had bake sales and other fundraising events to purchase other equipment as well as pay for fuel, power and maintenance of the station and equipment. In 1953 the residents decided that it was time to formalize the fire department and form a taxing fire district that evolved from an all-volunteer to a combination fire department. The fire district encompasses the City of Star, rural area, farming ground, and foothills, with a population of 16,500 district wide. The fire district evolved from just fire protection to fire and medical emergency responses as well as structural firefighting, wildland firefighting, and other tasks that we are called to do. The district is governed by a board consisting of three commissioners.

The Star Fire Protection District assumes responsibility for the adoption of this plan; Star Fire Protection District will oversee its implementation.

The District participates in the Public Protection Class Rating System and currently has a rating of 3/10.

19.2.2 Service Area

The District service area covers 55 square miles, serving a population of 16,500.

19.2.3 Assets

Table 19-2 summarizes the assets of the District and their value.

Asset	Value
Property	
3 Acres	450,000.00
Equipment	
Engine 51	620,000.00
Engine 52	400,000.00
Brush 51	375,000.00
Brush 52	100,000.00
Training Engine	50,000.00
Total:	\$1,995,000.00
Critical Facilities	
Station 51	\$9,500,000.00
Station 52	\$4,000,000.00
Total:	\$13,500,000.00

19.3 CURRENT TRENDS

The demand for the services we provide have been increasing for the last 10 years on an average rate of 7% as calculated by us using emergency responses per year. The City of Star population has increased by approximately 70% over the last 10 years and projections by the county were in the next 10 to 15 years we would be at 25,000 residents. We are partnering with Middleton Fire Department’s to jointly buy, build and staff future stations as demand for services arises. Star currently now staffed station on Kingsbury Rd Middleton Idaho in Star Fire Districts area that is being jointly staffed with Middleton Fire.

19.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 19-3.
- An assessment of fiscal capabilities is presented in Table 19-4.

- An assessment of administrative and technical capabilities is presented in Table 19-5.
- An assessment of education and outreach capabilities is presented in Table 19-6.
- Classifications under various community mitigation programs are presented in Table 19-7.

Table 19-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
The Ada County Multi-Hazard Mitigation Plan	2017	Update in progress

Table 19-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
<i>If yes, specify:</i> Plan Review Fees	
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	No
<i>If yes, specify:</i>	

Table 19-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	No
Engineers or professionals trained in building or infrastructure construction practices	No
Planners or engineers with an understanding of natural hazards	No
Staff with training in benefit/cost analysis	No
Surveyors	No
Personnel skilled or trained in GIS applications	No
Scientist familiar with natural hazards in local area	No
Emergency manager	No
Grant writers	No
Other	No

Table 19-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes (Fire Chief Greg Timinsky)
Do you have personnel skilled or trained in website development?	Yes (David Sparks)
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Safe burning practices	Yes
Do you use social media for hazard mitigation education and outreach?	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i>	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 19-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS#	Yes	838048635	N/A
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Public Protection	Yes	3/10	August 1, 2018
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

19.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

19.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Wildfire Risk Map**—Referred to mapping of hazards in the HMP.

19.5.2 Opportunities for Future Integration

The capability assessment presented in this annex reviewed potential opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. The capability assessment did not identify additional plans or programs to integrate hazard mitigation information in the future.

19.6 RISK ASSESSMENT

19.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 19-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 19-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19	DR-4534	January 20, 2020 and continuing	PPE reimbursements from State of Idaho, equipment purchased to work from home, personnel overtime costs totaling approximately \$400,000
Flood	DR-4342	March 29 – June 15, 2017	Countywide Public Assistance \$4,493,792
Wildfire		August 11, 2015	Thunderstorm winds knocked down a power pole and started a brush fire. SFD provided suppression support.
Flood		2012	Flood
Wildfires		August 15, 2011	Nine wildfires in Ada and Elmore Counties due to lightning burned overnight and into the morning. SFD provided suppression support.
Wildland Fire		August 22, 2010	Several thousand acres and homes burned
Wildfire		July 28, 2010	Lightning sparked a grass fire near Eagle and burned approximately 5000 acres and 5 structures including 3 homes. SFD provided suppression support.
Dam Failure/Flooding		2010	Annual event
Dam Failure/Flooding		2010	Annual event
Wind Events		Ongoing	Yearly events that cause damage to homes and personal property
Earthquake		1986	Challis

19.6.2 Hazard Risk Ranking

Table 19-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings. The rankings are based on the City of Star, local experiences, and understanding of the hazards as they relate to the district.

Table 19-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Wildfire	33	High
2	Extreme Weather	33	High
3	Drought	18	Medium
4	Dam/Canal Failure	18	Medium
5	Flood	18	Medium
6	Earthquake	12	Medium
7	Landslide	12	Low
8	Volcano	6	Low

19.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- The district is responsible for responding to emergencies along 6 miles of river frontage. These responses are not necessarily related to emergencies during flooding events but can occur at any time.
- Within the City of Star, heavy traffic is often an issue that impedes response time.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

19.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 19-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 19-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SFD-1 —Construct a new Fire Station on the South of Boise River outside of the floodplain and dam failure inundation area. <i>Comment: No plans for this area. Currently the responsibility of the City of Meridian.</i>		✓		
Action SFD-2 —Support County-wide initiatives identified in Volume 1 <i>Comment: Ongoing capability</i>			✓	SFD-3
Action SFD-3 —Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1. <i>Comment: Ongoing capability</i>			•	SFD-2

19.8 HAZARD MITIGATION ACTION PLAN

Table 19-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 19-12 identifies the priority for each action. Table 19-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 19-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action SFD-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. Including, but not limited to:</p> <ul style="list-style-type: none"> A new fire station north of the Boise River on Floating Feather Road, which will be out of the mapped floodplain. The district owns the land, but a station needs to be built. <p><u>Hazards Mitigated:</u> Wildfire, Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide</p>						
Existing	1, 3, 10	Star Fire District		High	HMGP, BRIC, FMA	Short-term
<p>Action SFD-2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p><u>Hazards Mitigated:</u> Wildfire, Drought, Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Volcano</p>						
New & Existing	All	Star Fire District		Low	Staff Time, General Funds	Short-term
<p>Action SFD-3— Support County-wide initiatives identified in Volume 1</p> <p><u>Hazards Mitigated:</u> Wildfire, Drought, Extreme Weather, Dam/Canal Failure, Flood, Earthquake, Landslide, Volcano</p>						
New & Existing	All	Star Fire District		Low	Staff Time, General Funds	Short-term
<p>Action SFD-4— Coordinate with developers as wildland area (north of Beacon Light to the County line) is developed. Area water sources for firefighting will need to be established before housing development occurs.</p> <p><u>Hazards Mitigated:</u> Wildfire</p>						
New	1, 3, 10	Star Fire District		High	HMGP, BRIC	Long-term
<p>Action SFD-5— Develop a Joint Emergency Operation Plan with the City of Star, Star Sewer and Water District, and Star Joint Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Star will lead this all-discipline action, but Star Sewer and Water District and Star Joint Fire Protection District will aid in planning for all hazards. (Coordinates with City of Star S-7 and Star Sewer and Water District SSW-4)</p> <p><u>Hazards Mitigated:</u> All Hazards</p>						
New & Existing	All	City of Star	SSW District, Star Joint Fire Protection District	Low	City Funds, District Funds, HMGP	Short-term
<p>Action SFD-6— Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach. (Coordinates with City of Star Action S-11)</p> <p><u>Hazards Mitigated:</u> Wildfire</p>						
New & Existing	8, 9	Star Joint Fire Protection District	City of Star	Low	City Funds, District Funds	Ongoing
<p>Action SFD-7— In partnership with Eagle Fire Protection District, Middleton Rural Fire District, and Star Fire Protection District, continue to support wildfire mitigation projects such as those sponsored by the Healthy Hills Initiative within the Eagle city limits or urban growth area. (Coordinates with Eagle Fire Protection District Action EFD-10, City of Eagle Action E-7)</p> <p><u>Hazards Mitigated:</u> Wildfire</p>						
New & Existing	2, 4, 5, 6, 7, 8, 9	City of Eagle	Eagle Fire Protection, Middleton Rural Fire District, Star Fire Protection District	Low	Staff Time HMGP, BRIC	Ongoing

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 19-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	10	Low	Low	Yes	No	Yes	High	Low
3	10	Low	Low	Yes	No	Yes	High	Low
4	3	High	High	Yes	Yes	No	Medium	High
5	10	Low	Low	Yes	Yes	Yes	High	Medium
6	2	Low	Low	Yes	No	Yes	High	Low
7	7	Medium	Low	Yes	Yes	No	Medium	Medium

a. See the introduction to this volume for explanation of priorities.

Table 19-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Wildfire		SFD-1	SFD-6			SFD-4		SFD-2, 3, 5, 7
Extreme Weather		SFD-1						SFD-2, 3, 5
Medium-Risk Hazards								
Drought								SFD-2, 3, 5
Dam/Canal Failure		SFD-1						SFD-2, 3, 5
Flood		SFD-1						SFD-2, 3, 5
Earthquake		SFD-1						SFD-2, 3, 5
Low-Risk Hazards								
Landslide		SFD-1						SFD-2, 3, 5
Volcano								SFD-2, 3, 5

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

19.9 PUBLIC OUTREACH

Table 19-14 lists public outreach activities for this jurisdiction.

Table 19-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Public School Outreach for Fire Prevention/Career Day	Every October	3 firefighters, approximately 200 students

19.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

20. STAR SEWER AND WATER DISTRICT

20.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Ryan V. Morgan, District Engineer
10831 West State Street
Star, ID, 83369
Telephone: 208-286-7388
e-mail Address: rmorgan@starswd.com

Alternate Point of Contact

Hank Day, Public Works Director
10831 West State Street
Star, ID, 83369
Telephone: 208-286-7388
e-mail Address: hday@starswd.com

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 20-1.

Table 201. Local Hazard Mitigation Planning Team Members

Name	Title
Ryan Morgan	District Engineer
Hank Day	District Public Works Director
Terra Estarada	District Office Manager
Greg Timinsky	District Board Member

20.2 JURISDICTION PROFILE

20.2.1 Overview

The Star Sewer & Water District (District) receives its operating authority from Idaho State Code, Title 42, Chapter 32, Sections 43-3201 to 42-3238. The District was created 1966 in response to a need for central water and sewer service. A five-member elected Board of Directors governs the District. The District's current service area is bounded by Kingsbury Road to the west, Highway 16 and Plummer Road on the east, the Highway 20/26 to the south, and the foothills to the north. The District's impact area was established based on topographic, natural and existing jurisdictional boundaries.

The District provides both sewer and water services to an area which includes the City of Star and unincorporated lands in Ada and Canyon County. The area's economic base consists of agriculture, commercial, and some light industrial districts. The District is committed to providing the service area with quality water and sewer service for residential, commercial, and most industrial/public needs.

Star Sewer & Water District operates a wastewater treatment plant consisting of a membrane bioreactor mechanical plant, and a partially aerated treatment and polishing lagoon treatment system. The combined effluent

from the lagoon and mechanical plant discharges to the Lawrence-Kennedy Canal under an NPDES permit that has been in effect since September 1999.

Sewer lift stations serve as a central point of collection for gravity sewer lines. The raw sewage is conveyed by gravity to these collection points and the lift stations pressurize and lift the sewage either into other gravity collection lines or push the flow directly to the wastewater treatment plant. The District currently owns six lift stations located on Big Wood Way (River Ranch), WWTP property, W State Street (Western Regional, Short Lane (Amazon Falls), Hidden Dale Drive (Craftsman), and Joplin Road (Southern Regional Lift Station)

The District owns five operable wells and two water storage tanks. Three wells are primary wells that are used to fill the tank with groundwater and or serve water to the public directly. Water flows by gravity out of the tank and provides pressurized domestic and fire flows to the service area. The District also maintains a distribution system including approximately 90 miles of pipeline.

Star Sewer & Water District operates almost exclusively on revenue from new connections and current user fees. A small amount is also levied on property taxes to pay for the District’s operation and maintenance costs and the property and administrative liability insurance.

The Star Sewer and Water District Board assumes responsibility for the adoption of this plan; Star Sewer and Water District will oversee its implementation.

20.2.2 Service Area

The District serves a population of approximately 15,000 as of 2022. Its service area covers an area of 25 square miles, which has a total market value (including occupancy rolls) of \$2,401,619,819

20.2.3 Assets

Table 20-2 summarizes the assets of the District and their value.

Asset	Value
Property	
14.5 acres of land	\$1,450,000
Equipment	
Operations and Maintenance Vehicles	\$450,000
87 Miles of sewer pipe	\$55,123,000
87 miles of water pipe	\$43,639,000
Total:	\$99,212,000
Critical Facilities	
District Office	\$1,160,000
Wastewater Treatment Plant	\$45,000,000
River Ranch Lift Station	\$750,000
Western Regional Lift Station	\$1,100,000
Craftsman Lift Station	\$750,000
Amazon Falls Lift Station	\$850,000
Southern Regional Lift Station	1,750,000

Asset	Value
Well 3 and Well House	400,000
Well 6 and Well 7	\$3,500,000
Water Tanks (2)	1,250,000
Booster Station	\$600,000
Total:	\$54,700,000

20.3 CURRENT TRENDS

Population trends used to estimate future population of the Star Sewer & Water District service area can be approximated by utilizing existing population projections created for the District in the 2015 Wastewater Facility Planning Study. From 2000 to 2022, the City of Star experienced a ten-fold increase in population. Even during the recent downturn in the housing market, the City of Star maintained a fairly steady growth rate. For example, in fiscal year 2014, the Star Sewer & Water District issued 213 new sewer/water connections, in 2015 that number was 200 new sewer/water connections. During 2021 the District issued 1098 new sewer/water connections

If a growth percentage of 5% (as selected by District officials for the 2015 Wastewater Facility Planning Study) is used, the estimated population served by the Star Sewer & Water District will be approximately 22,500 by 2030. It should be noted that current growth rates have been higher than 5% and the population estimate could be as high as 30,000 by 2030.

20.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 20-3.
- An assessment of fiscal capabilities is presented in Table 20-4.
- An assessment of administrative and technical capabilities is presented in Table 20-5.
- An assessment of education and outreach capabilities is presented in Table 20-6.
- Classifications under various community mitigation programs are presented in Table 20-7.

Table 20-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Clean Water Act	1972	
Endangered Species Act	1973	
Idaho Department of Environmental Quality	N/A	
U.S. Environmental Protection Agency	N/A	
Idaho Administrative Code	N/A	
Idaho Administrative Procedure Act	N/A	
Wastewater Facility Planning Study (2015)	2015	Applied for grant to update this plan
Water System Master Plan Update (2014)	2014	Applied for grant to update this plan
Idaho Statewide Implementation Plan		
All other applicable laws, ordinances, codes and policies enforced by federal, state and local authorities with a sphere of influence over the District's service area.		
Star Sewer and Water District Construction Drawing Standards	April 2020	

Table 20-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify:</i> Water and Sewer	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Fees for Homebuyers or Developers	Yes
Other	Yes
<i>If yes, specify:</i> Local Improvement District, Community Improvement District	

Table 20-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> District Engineer and Contract Engineering Firm	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> District Engineer and Contract Engineering Firm	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> District Engineer	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Contract engineer	Yes
Surveyors <i>If Yes, Department /Position:</i> Contract engineer	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> District engineer and Water Department Staff Member	Yes
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Contract engineer	Yes
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management and Community Resilience	Yes
Grant writers <i>If Yes, Department /Position:</i> Contract engineering firm	Yes

Table 20-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	No
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i>	No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i>	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i>	No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings. We also have the ability to mass email costumers about emergency situations.	Yes

Table 20-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	N/A	N/A	N/A
DUNS#	Yes	027210330	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	N/A	N/A	N/A
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A

20.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

20.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **City of Star Comprehensive Plan**—The 2008 Star Comprehensive Plan includes mitigation related policies as they relate to the protection of human life and property from flood events.
- **Ada County Wildfire Response Plan**—The Wildfire Response Plan for Ada County includes procedures that will mitigate risk to human life and property from a wildfire.

20.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **Star City, Star Sewer & Water District, and Star Joint Fire Protection District Joint Emergency Operation Plan (EOP)**—This joint plan has not been developed, but the Multi-Hazard Mitigation Plan hazard and risk data will inform the EOP.
- **Star Sewer & Water District Continuity of Operation Plan (COOP)**—This plan has not been developed, but the Multi-Hazard Mitigation Plan hazard and risk data will inform the COOP.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

20.6 RISK ASSESSMENT

20.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 20-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 20-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19	DR-4534	January 20, 2020 and continuing	Overtime and adaptations in work conditions
Flooding	DR-4342	May/June 2017	Public Assistance Countywide: \$4,493,792
Flooding	N/A	May 30, 2011	\$4,500

20.6.2 Hazard Risk Ranking

Table 20-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 20-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	33	High
2	Earthquake	33	High
3	Extreme Weather	33	High
4	Landslide	16	Medium
5	Wildfire	16	Medium
6	Dam/Canal Failure	12	Low
7	Drought	9	Low
8	Volcano	6	Low

20.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- The District has one major trunk line that is responsible for 80% of the flow to 80% of the City of Star. This trunk line is located in farm fields that have a high potential for development, currently several of these fields are under development with a high risk of damage to the pipeline. This has already happened once in the last 2 months. The District intends to reroute this pipeline to be located in public right of way under pavement.

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

20.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 20-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 20-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>SSW-1—Add Backup Generators to Trellis Wells: The groundwater wells in the Trellis Subdivision currently have no backup power source to continue operating in the case of a power outage. To continue to provide service during hazards, both wells will be equipped with backup generators.</p> <p>Comment: <i>Generators have been added to one of the Trellis Wells, the second well is no longer operational.</i></p>	✓			
<p>SSW-2—Add Backup Generator to River Ranch Lift Station: The lift station currently has no backup power source to continue operating in the case of a power outage. To continue to provide service during hazards, the lift station will be equipped with a backup generator.</p> <p>Comment: <i>Completed in 2020</i></p>	✓			
<p>SSW-3—Waterproof Manholes in 100-year Floodplain: The sewer collection system has many pipes and manholes that are in the 100-year floodplain. The manhole lids and structures are not waterproof and could pose significant risk to other facilities if flood water were to enter through the manholes.</p> <p>Comment: <i>Manholes are being identified and new policies are being prepared. New construction requires manhole rims to be located 0.5 feet above the base flood elevation. All new construction is being built to the mentioned standards, the district is still identifying manholes to floodproof.</i></p>			✓	SSW-3
<p>SSW-4—Assess Flood Risk of WWTP, Western Regional Lift Station, and River Ranch Lift Station: The risk to these facilities has not been evaluated since new FIRM maps were created. In order to prevent possible damage from flood events, a flood risk evaluation should be completed.</p> <p>Comment: <i>Completed 8/17/20</i></p>	•			
<p>SSW-5—Develop a Joint Emergency Operation Plan with Star City and Star Joint Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Star will lead this all-discipline action, but Star Sewer & Water District will aid in planning for all hazards.</p> <p>Comment: <i>Plan needs reviewed and updated.</i></p>			✓	SSW-4
<p>SSW-6—Develop a Continuity of Operation Plan: This plan will provide specific policies and procedures that will be carried out in the event of an emergency, including localized acts of nature, accidents, and technological or attack-related emergencies. The plan will address how the District will continue to perform essential functions in the event of compromised facilities or leadership, and how the District will return to normal operations.</p> <p>Comment: <i>The treatment plant is in the middle of a major upgrade. Plans are being prepared after completion the current District Operation Plan will be reviewed and updated. Plat upgrade should be completed in early 2023</i></p>			✓	SSW-5
<p>SSW-7—Support County-wide Initiatives Identified in Volume 1 of the Multi-Hazard Mitigation Plan</p> <p>Comment: <i>SSWD will continue to work with other agencies.</i></p>			✓	SSW-6
<p>SSW-8—Actively Participate in the Plan Maintenance Protocols Outlined in Volume 1 of the Multi-Hazard Mitigation Plan</p> <p>Comment: <i>SSWD is working with other agencies and supporting their efforts.</i></p>			•	SSW-2

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
<p>SSW-9—SCADA System at Trellis Wells: The wells in the Trellis subdivision currently don't have any emergency alert system or automatic operational controls in place. In order to receive emergency alerts from these wells, a SCADA system must be installed and this system must have cable or satellite communication with the District operations office.</p> <p><i>Comment:</i> SCADA has been added to one of the Trellis Wells, the second well is no longer operational</p>	✓			
<p>SSW-10—Water Tank Power & SCADA (Supervisory Control and Data Acquisition): The water tank currently receives power from solar panels and batteries. In addition, there is no SCADA system. In case of an emergency, a backup primary power supply would provide more reliability in operations for the water tank; primary power supply will be extended to the tank as part of this project. In order to receive emergency alerts from the tank, a SCADA system must be installed and this system must have cable or satellite communication with the operations office.</p> <p><i>Comment:</i> The new water tank and booster station improvements have been completed</p>	✓			
<p>SSW-11—Add Backup Generator at the WWTP: The WWTP currently has one backup power generator, but this generator is not capable of powering the entire plant. A second backup generator is recommended to improve redundancy and expand backup power to full plant operations.</p> <p><i>Comment:</i> Construction is currently underway for the WWTP expansion. Improvements include an additional generator that will meet the needs of the WWTP.</p>			✓	SSW-7

20.8 HAZARD MITIGATION ACTION PLAN

Table 20-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 20-12 identifies the priority for each action. Table 20-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 20-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
<p>Action SSW-1—Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.</p> <p>Hazards Mitigated: Flood, Earthquake, Landslide, Wildfire, Severe Weather, Dam/Canal Failure</p>						
Existing	All	SSWD	N/A	High	HMGP, BRIC, FMA	Short-term
<p>Action SSW-2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.</p> <p><i>Hazards Mitigated:</i> All Hazards</p>						
New & Existing	All	SSW District	N/A	Low	Staff Time, District Funds	Short-term
<p>Action SSW-3—Waterproof Manholes in 100-year Floodplain: The sewer collection system has many pipes and manholes that are in the 100-year floodplain. The manhole lids and structures are not waterproof and could pose significant risk to other facilities if flood water were to enter through the manholes.</p> <p><i>Hazards Mitigated:</i> Flood, Severe Weather, Dam/Canal Failure</p>						
Existing	1, 10	SSW District	N/A	High	District Funds, HMGP	Long-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action SSW-4 — Develop a Joint Emergency Operation Plan with the City of Star, Star Sewer and Water District, and Star Joint Fire Protection District: This plan is necessary to establish a single, comprehensive framework for the management of domestic incidents. The City of Star will lead this all-discipline action, but Star Sewer and Water District and Star Joint Fire Protection District will aid in planning for all hazards. (Coordinates with City of Star Action S-7 and Star Joint Fire Protection District SFD-5)						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	All	City of Star	SSW District, Star Joint Fire Protection District	Low	City Funds, District Funds, HMGP	Short-term
Action SSW-5 — Develop a Continuity of Operation Plan: This plan will provide specific policies and procedures that will be carried out in the event of an emergency, including localized acts of nature, accidents, and technological or attack-related emergencies. The plan will address how the District will continue to perform essential functions in the event of compromised facilities or leadership, and how the District will return to normal operations.						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	All	SSW District	N/A	Low	Staff Time, District Funds	Short-term
Action SSW-6 — Support County-wide Initiatives Identified in Volume 1 of the Multi-Hazard Mitigation Plan						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	All	SSW District	N/A	Low	Staff Time, District Funds	Short-term
Action SSW-7 — Add Backup Generator at the WWTP: The WWTP currently has one backup power generator, but this generator is not capable of powering the entire plant. A second backup generator is recommended to improve redundancy and expand backup power to full plant operations.						
<i>Hazards Mitigated:</i> All Hazards						
New & Existing	3, 7, 10	SSW District	N/A	High	District Funds, HMGP	Short-term

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 20-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
SSW-1	10	High	High	Yes	Yes	No	Medium	High
SSW-2	10	Low	Low	Yes	No	Yes	High	Low
SSW-3	2	High	Medium	Yes	Yes	No	Medium	High
SSW-4	10	Low	Low	Yes	Yes	Yes	High	Medium
SSW-5	10	Low	Low	Yes	No	Yes	High	Low
SSW-6	10	Low	Low	Yes	No	Yes	High	Low
SSW-7	3	Medium	Medium	Yes	Yes	Yes	High	Medium

a. See the introduction to this volume for explanation of priorities.

Table 20-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Flood		SSW-1, 3	SSW-2		SSW-7			SSW-2, 4, 5, 6
Earthquake		SSW-1, 3	SSW-2		SSW-7			SSW-2, 4, 5, 6
Extreme Weather		SSW-3	SSW-2		SSW-7			SSW-2, 4, 5, 6
Medium-Risk Hazards								
Landslide		SSW-1, 3	SSW-2		SSW-7			SSW-2, 4, 5, 6
Wildfire		SSW-1, 3	SSW-2		SSW-7			SSW-2, 4, 5, 6
Low-Risk Hazards								
Dam/Canal Failure		SSW-3	SSW-2		SSW-7			SSW-2, 4, 5, 6
Drought			SSW-2		SSW-7			SSW-2, 4, 5, 6
Volcano			SSW-2		SSW-7			SSW-2, 4, 5, 6

- a. See the introduction to this volume for explanation of mitigation types.
- b. Based on current community capacity, this jurisdiction did not identify a need for expansion of administrative and technical capabilities. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

20.9 PUBLIC OUTREACH

Table 20-14 lists public outreach activities for this jurisdiction.

Table 20-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
Monthly Newsletter includes water conservation items and other timely tips	Ongoing	All district clients
Water Aware Brochure	April/May 2020	Provided at most local events including Easter egg hunt & fishing derby

20.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.
- **Wastewater Facility Planning Study (2015)**—Used to help identify historic and future growth information, as well as infrastructure needs.
- **Water System Master Plan Update (2014)**—Used to help identify historic and future growth information, as well as infrastructure needs.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

21. WHITNEY FIRE PROTECTION DISTRICT

21.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Greg Womack, Fire Chief
2515 S. Five Mile Road
Boise, ID 83709
Telephone: 208-869-5210
e-mail Address: gwomack@whitneyfiredistrict.org

Alternate Point of Contact

Mallory Wilson, Emergency Manager
333 N. Mark Stall Place
Boise, ID 83704
Telephone: 208-570-6552
e-mail Address: mgwilson@cityofboise.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 21-1.

Table 21-1. Local Hazard Mitigation Planning Team Members

Name	Title
Greg Womack	Fire Chief
Renn Ross	Fire Chief (Retired during plan update)
Mallory Wilson	Emergency Manager
Jerry McAdams	Wildfire Mitigation Specialist

21.2 JURISDICTION PROFILE

21.2.1 Overview

The Whitney Fire Protection District (WFPD) is a tax district created pursuant to Idaho Code, Title 31 Counties and County Law, Chapter 14 Fire Protection District. The WFPD is responsible for the protection of property against fire and the preservation of life and for the enforcement of any of the fire codes and other rules adopted by the Idaho State Fire Marshal. The WFPD was established in 1947.

A three-member elected Board of Fire Commissioners, each serving a staggered four-year term, elected from a specific sub-district, governs the WFPD. The Fire Chief provides contract administration between the WFPD and the City of Boise Fire Department. The primary source of revenue for the WFPD is generated through the collection of property taxes, with some state sales tax revenues and interest income.

The WFPD contracts with the Boise City Fire Department for all operational services, some fire prevention services and logistical support services. The WFPD owns one fire station and maintains a fleet of two engines and one tender. The WFPD station and apparatus are staffed by the Boise City Fire Department per the contract agreement.

The WFPD service area encompasses approximately 18 square miles, primarily residential and rural areas within Ada County. The majority of the WFPD lies within the Area of Impact of the City of Boise and is subject to annexation at the discretion of the city.

The Whitney Fire Protection District assumes responsibility for the adoption of this plan; the Boise City Fire Department will oversee its implementation.

The District participates in the Public Protection Class Rating System and currently has a rating of 3 for properties within 1000 feet of a hydrant and an 8 for properties beyond 1000 feet from a hydrant but within 5 miles of a fire station.

21.2.2 Service Area

The district serves a population of 21,000. Its service area covers an area of 18 square miles, which has a total value of \$3,489,026,167.00.

21.2.3 Assets

Table 21-2 summarizes the assets of the District and their value.

Asset	Value
Property	
1.6 acres of land (owned by the City of Boise)	N/A
Equipment	
2003 Pierce Fire Engine	\$287,000
2008 Pierce Fire Engine	\$408,873
2010 Pierce Water Tender	\$324,954
Total:	\$1,020,827
Critical Facilities	
Fire Station #17	\$3,211,687
Total:	\$3,211,687

21.3 CURRENT TRENDS

The district has seen growth in both population and valuation over the last several years. The district covers a significant inventory of residential homes south of the City of Boise but within the City’s Impact Area.

21.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this

annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 21-3.
- An assessment of fiscal capabilities is presented in Table 21-4.
- An assessment of administrative and technical capabilities is presented in Table 21-5.
- An assessment of education and outreach capabilities is presented in Table 21-6.
- Classifications under various community mitigation programs are presented in Table 21-7.

Table 21-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Ada County Ordinance Title 8, Chapter 3, Article B: Wildland-Urban Interface Overlay District.	6/14/2000	N/A
Ada County Ordinance Title 7, Chapter 3 Adoption of the ICC Urban-Wildfire Interface Code, 2006 Edition	6/18/2008	N/A
Annexation Policy	6/12/2008	N/A

Table 21-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	No
Capital Improvements Project Funding	No
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No

Table 21-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes
Surveyors <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes

Staff/Personnel Resource	Available?
Scientist familiar with natural hazards in local area	No
Emergency manager <i>If Yes, Department /Position:</i> Ada County Emergency Management	Yes
Grant writers <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes
Other <i>If Yes, Department /Position:</i> Contract with City of Boise	Yes

Table 21-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes – Contract with City of Boise
Do you have personnel skilled or trained in website development?	Yes – Contract with City of Boise
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Contract with City of Boise	Yes
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Contract with City of Boise	Yes
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i>	No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Contract with City of Boise	Yes
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.	Yes

Table 21-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	No	N/A	N/A
DUNS#	Yes	832898048	N/A
Community Rating System	N/A	N/A	N/A
Building Code Effectiveness Grading Schedule	N/A	N/A	N/A
Public Protection	Yes	3-10	7/23/2016
Storm Ready	Yes	N/A	N/A
Firewise	Yes	N/A	N/A

21.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for future integration. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

21.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **Ada County Wildfire Response Plan**— To provide for the life safety of for responders and the populace. Minimize damage to valued resources and the environment from the adverse effects of Wildfire. Develop community awareness and understanding of the wildfire hazard.
- **Ada County Flood Response Plan**— To prevent injury and loss of life due to flooding and flood related causes. Develop Community awareness and understanding of the flood hazard.

21.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- All future updates to plans and programs as identified in the “Existing Integration” section above may use hazard mapping and data from this Multi-Hazard Mitigation Plan to determine hazard areas and increase community awareness.

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan in this annex.

21.6 RISK ASSESSMENT

21.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 21-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 21-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
COVID-19 Pandemic	DR-4534	1/20/20-ongoing	N/A
Flooding	DR-4342	3/29/2017	Public Assistance County-wide: \$4,493,792
Winter Storms	N/A	December 2016	Extreme snowfall impacted services
Grass Fire	N/A	7/2/2011	N/A
Brush Fire	N/A	7/4/2011	N/A
Natural Vegetation Fire	N/A	9/11/2011	N/A
Brush Fire	N/A	9/28/2011	N/A
Brush Fire	N/A	3/28/2012	N/A
Grass Fire	N/A	6/12/2012	N/A
Grass Fire	N/A	7/5/2012	N/A
Grass Fire	N/A	8/12/2012	N/A

Type of Event	FEMA Disaster #	Date	Damage Assessment
Brush Fire	N/A	10/29/2012	N/A
Natural Vegetation Fire	N/A	2/10/2013	N/A
Brush Fire	N/A	3/9/2013	N/A
Grass Fire	N/A	7/1/2013	N/A
Brush Fire	N/A	9/16/2013	N/A
Grass Fire	N/A	7/1/2014	N/A
Grass Fire	N/A	7/5/2014	N/A
Brush Fire	N/A	7/22/2014	N/A
Natural Vegetation Fire	N/A	10/15/2015	N/A

21.6.2 Hazard Risk Ranking

Table 21-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 21-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1	Severe Weather		High
2	Wildfire		Medium
3	Flood		Medium
4	Earthquake		Medium
5	Landslide		Low
6	Dam Failure		Low
7	Drought		Low
8	Volcano		Low

21.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

Mitigation actions addressing these issues were prioritized for consideration in the action plan in this annex.

21.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 21-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 21-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action WFD-1—Enforce existing wildland urban interface standards in Ada County. <i>Comment: Ongoing. Carried over and reworded slightly to better represent the intent of the action.</i>			X	WFD-3
Action WFD-2—Require Local Fire District Approval of Water and Access Requirements for all projects. <i>Comment: Ongoing</i>			X	WFD-4
Action WFD-3—Promote adoption of Firewise for development within the wildland urban interface Overlay <i>Comment: Ongoing</i>			X	WFD-5
Action WFD-4—Support County-wide initiatives identified in Volume 1. <i>Comment: Ongoing</i>			X	WFD-6
Action WFD-5—Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1. <i>Comment: Ongoing</i>			X	WFD-2
Action WFD-6—Provide fire safety, fire prevention and Firewise education to neighborhoods, schools and community via the internet, social media and direct public outreach. <i>Comment: Ongoing</i>			X	WFD-7
Action WFD-7—Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation projects. <i>Comment: Ongoing</i>			X	WFD-8

21.8 HAZARD MITIGATION ACTION PLAN

Table 21-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 21-12 identifies the priority for each action. Table 21-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 21-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action WFD-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. Hazards Mitigated: Flood, Earthquake, Wildfire						
Existing	2, 3, 4	Whitney Fire	N/A	High	HMGP, BRIC, FMA	Short-term
Action WFD-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. Hazards Mitigated: All hazards						
New & Existing	1, 2, 6, 7, 8, 9, 10	Whitney Fire	N/A	Low	Staff Time, local funds	Short-term
Action WFD-3 — Update, adopt, and enforce a new Wildland Urban Interface (WUI) Code to replace the existing code. Improve and update existing WUI hazard zones. (Coordinates with City of Boise Action B-11, North Ada County Fire & Rescue Action NACFR-3) Hazards Mitigated: Wildfire						

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
New & Existing	1, 2, 4, 5, 6, 9, 10	Boise Fire Department	NACFR, Whitney Fire	Low	Local	Short-Term

Action WFD-4— Require Local Fire District Approval of Water and Access Requirements for all projects.

Hazards Mitigated: Wildfire

New	1, 2, 4, 5, 9	Whitney Fire	Ada County	Low	Local funds	Short-term and ongoing
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Action WFD-5— Continue Firewise Community program for residents in the foothills and promote adoption of Firewise for development within the wildland urban interface overlay. (Coordinates with City of Boise Action B-21, North Ada County Fire & Rescue Action NACFR-4)

Hazards Mitigated: Wildfire

New and Existing	1, 2, 5, 6, 8, 9	Boise Fire Department	NACFR, Whitney Fire	Low	Local funds	Short-term and ongoing
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Action WFD-6— Support County-wide initiatives identified in Volume 1.

Hazards Mitigated: All Hazards

New and Existing	1, 2, 6, 7, 8, 9, 10	Whitney Fire		Low	Local	Short-term and ongoing
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Action WFD-7— Conduct wildland fire prevention education and outreach via the internet, social media and direct public outreach to support and promote fire adapted communities. Focus on fuel reduction on private property around new and existing homes via incentivizing homeowners, providing free debris pick-up and replacement Firewise vegetation at a discount. (Coordinates with City of Boise Action B-8, North Ada County Fire & Rescue Action NACFR-14)

Hazards Mitigated: Wildfire

New and Existing	1, 8, 9, 10	Boise Fire Department	NACFR, Whitney Fire	Low	Western State Grant, Local	Short-term and Ongoing
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Action WFD-8— Meet and coordinate with private organizations, state, federal and other local agencies to develop, conduct and maintain wildfire mitigation and fuel-reduction projects, including prescribed fire (Rx fire), pile-burning and managed fire. Increase capacity to conduct these projects through hiring personnel and expenditures for equipment and biological control methods. (Coordinates with City of Boise Action B-15, Flood Control District #10 Action FCD10-12, North Ada County Fire & Rescue District Action NACFR-15)

Hazards Mitigated: Wildfire

New and Existing	1, 6, 9, 10	Boise Fire	FCD #10, NACFR, Whitney Fire	Low	General fund	Ongoing
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Action WFD-9— Complete a Wildland-Urban Interface (WUI) risk assessment (a GIS exercise looking at vegetation in the undeveloped area, age of homes and other relevant factors). Improve individual parcel data with wildfire assessments. Provide a public portal to share data and educate on risk and community wildfire adaptation. (Coordinates with City of Boise Action B-7 and North Ada County Fire & Rescue District Action NACFR-5)

Hazards Mitigated: Wildfire

New and Existing	2, 4, 6, 8, 9, 10	Boise Fire Department	Whitney Fire, NACFR	Medium	Western States Grant, HMGP Grant, Local	Short-term and ongoing
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a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 21-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	Yes	Yes	High	High
3	7	Medium	Low	Yes	No	Yes	High	Low
4	5	Medium	Low	Yes	No	Yes	High	Low
5	6	High	Low	Yes	Yes	Yes	High	High
6	7	Medium	Low	Yes	Yes	Yes	High	High
7	2	Medium	Low	Yes	No	Yes	High	Low
8	4	High	Low	Yes	No	Yes	High	Low
9	6	High	Medium	Yes	Yes	Yes	Medium	Medium

a. See the introduction to this volume for explanation of priorities.

Table 21-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building ^b
High-Risk Hazards								
Severe Weather								WFD-2, 6
Medium-Risk Hazards								
Wildfire	WFD-3, 4, 5	WFD-1, 3, 4, 5	WFD-1, 5, 7	WFD-3, 4, 5, 7, 8				WFD-2, 3, 5, 7, 8, 9
Flood		WFD-1						WFD-2, 6
Earthquake		WFD-1						WFD-2, 6
Low-Risk Hazards								
Landslide								WFD-2, 6
Dam Failure								WFD-2, 6
Drought								WFD-2, 6
Volcano								WFD-2, 6

a. See the introduction to this volume for explanation of mitigation types.

b. In addition to the community capacity building actions listed in this table, this jurisdiction is expanding its financial capabilities through its participation in and adoption of this hazard mitigation plan, which establishes grant-funding eligibility.

21.9 INFORMATION SOURCES USED FOR THIS ANNEX

The following reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **2017 Ada County Multi-Hazard Mitigation Plan** – The previous HMP was reviewed to update this annex.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

2022 Ada County Multi-Hazard Mitigation Plan

Appendix A. Annex Instructions and Templates

Instructions for Completing Municipal Annex Template

INSTRUCTIONS FOR COMPLETING MUNICIPAL ANNEX TEMPLATE

Jurisdictional annex templates for the 2022 *Ada County Hazard Mitigation Plan* update will be completed in three phases. **This document provides instructions for completing Phase 3 of the template for municipalities.**

The target timeline for completion is as follows:

- **Phase 1**—Team, Profile, Trends, and Previous Plan Status
 - **Deploy:** July 19, 2021
 - **Due:** September 3, 2021 by close of business
- **Phase 2**—Capability Assessment, Integration Review, and Information Sources
 - **Deploy:** September 27, 2021
 - **Due:** November 12, 2021 by close of business
- **Phase 3**—Risk Assessment, Action Plan, Information Sources, Future Needs, and Additional Comments
 - **Deploy:** April 12, 2022
 - **Mandatory Phase 3 Workshops:** Targeted for the week of April 11. We will schedule multiple workshops during that week to provide options for attendance
 - **Due:** May 13, 2022 by close of business, Mountain Time

Please direct any questions and return your completed Phase 3 template in electronic format to:

Megan Brotherton
Tetra Tech
Phone: (808) 339-9119
E-mail: megan.brotherton@tetrattech.com

A Note About Formatting

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner.

Content should be entered directly into the template rather than creating text in another document and pasting it into the template. Text from another source may alter the formatting of the document.

The section and table numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of the numbering.

For planning partners who participated in the 2017 planning effort, relevant information has been brought over to the 2022 template. Fields that require attention have been highlighted using the following color coding:

- **Yellow:** Text has been brought over from 2017 Plan and should be reviewed and updated as needed.
- **Green:** This is a new field that will require information that was not included in 2017.

Un-highlight each field that you update so that reviewers will know an edit has been made.

New planning partners will need to complete the template in its entirety.

PHASE 1 INSTRUCTIONS

CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your municipality (e.g., City of Pleasantville, West County). Do not change the chapter number. Revise only the jurisdiction name. If your jurisdiction’s name has already been entered, verify that wording and spelling are correct; revise as needed.

LOCAL HAZARD MITIGATION PLANNING TEAM

Points of Contact

Provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

Note: Both of these contacts should match the contacts that were designated in your jurisdiction’s letter of intent to participate in this planning process. If you have changed the primary or secondary contact, let the planning team know by inserting a comment into the document.

Who Should Be on the Local Mitigation Planning Team

The Local Hazard Mitigation Planning Team is responsible for developing your jurisdiction’s annex to the hazard mitigation plan. Team membership should represent agencies with authority to regulate development and enforce local ordinances or regulatory standards, such as building/fire code enforcement, emergency management, emergency services, floodplain management, parks and recreation, planning/ community development, public information, public works/ engineering, stormwater management, transportation, or infrastructure.

Participating Planning Team

Populate Table 1-1 with the names of staff from your jurisdiction who participated in preparing this annex or otherwise contributed to the planning process for this hazard mitigation plan.

JURISDICTION PROFILE

Provide information specific to your jurisdiction as indicated, in a style similar to the examples provided below. This should be information that will not be provided in the overall mitigation plan document.

If Municipal (incorporated city) GIS data files are available, please send with your completed Phase 1. The files should include GIS data for facilities such as city halls, public works buildings, community centers, city police stations, city fire stations.

Location and Features

Describe the community's location, size and prominent features, in a statement similar to the example below:

EXAMPLE: The City of Jones is in the northwest portion of Smith County, along the Pacific Coast in northern California. It is almost 150 miles northeast of San Francisco. The city's total area is 4.2 square miles, with boundaries generally extending north-south from State Highway 111 to the Johnson River and east-west from Coast Road to East Frank Avenue. The City of Allen is to the north, unincorporated county is to the west, the City of Bethany is to the south, and the Pacific Ocean is to the west.

Jones is home to the University of Arbor, Bickerson Manufacturing, and the western portion of Soosoo National Park. Significant geographic features include the Watery River, which flows southwest across the city, Lake Splash in the city's northwest corner, and the foothills of the Craggy Mountains on the east side.

History

Describe the community's history, focusing on economy and development, and note its year of incorporation, in a statement similar to the example below:

EXAMPLE: The City of Jones was incorporated in 1858. The area was settled during the gold rush in the 1850s as a supply center for miners. As the gold rush died down, timber and fishing became the area's major economic resources. By 1913, the Jones Teachers College, a predecessor to today's University of Arbor, was founded. Recently, the presence of the college has come to shape Jones' population into a young and educated demographic. In 1981 the City developed the Jones Marsh and Wildlife Sanctuary, an environmentally friendly sewage treatment enhancement system.

With numerous annexations since its original incorporation, the city's area has almost doubled. Today it features a commercial core in the center of the city, with mostly residential areas to the north and south, the university to the west and the national park on the east.

Governing Body Format

Describe the community's key governance elements and staffing, in a statement similar to the example below:

EXAMPLE: The City of Jones is governed by a five-member city council. The City consists of six departments: Finance, Environmental Services, Community Development, Public Works, Police, and the City Manager's Office. The City has 13 commissions and task forces, which report to the City Council. The City currently employs a total of 155 employees (full-time equivalent).

The City Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.

CURRENT TRENDS

Population

Provide the most current population estimate for your jurisdiction based on an official means of tracking (e.g., the U.S. Census or state agency that develops population estimates). Describe the current estimate and recent population trends in a statement similar to the example below.

EXAMPLE: According to California Department of Finance, the population of Jones as of July 2020 was 17,280. Since 2010, the population has grown at an average annual rate of 1.2 percent, though that rate is declining, with an annual average of only 0.8 percent since 2015.

Development

In the highlighted text that says “Describe trends in general,” provide a brief description of your jurisdiction’s recent development trends in a statement similar to the example below:

EXAMPLE: Anticipated future development for Jones is low to moderate, consisting primarily of residential growth. Recent development has been mostly infill. There has been a focus on affordable housing and a push for more secondary mother-in-law units. Future growth in the City will be managed as identified in the City’s 2018 general plan. City actions, such as those relating to land use, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with the plan.

Complete the table titled “Recent and Expected Future Development Trends.” Note:

- The portion of the table requesting the number of permits by year is specifically looking for development permits for **new** construction. If your jurisdiction does not have the ability to differentiate between permit types, list the total number of permits and indicate “N/A” (not applicable) for the permit sub-types.
- If your jurisdiction does not have the ability to track permits by hazard area, delete the bullet list of hazard areas and insert a qualitative description of where development has occurred.

PUBLIC OUTREACH

Note that this section is part of the Phase 3 annex, but documentation can begin in Phase 1 if applicable.

FEMA requirements for public outreach will be met by the County’s engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

THIS COMPLETES PHASE 1

PHASE 2 INSTRUCTIONS

CAPABILITY ASSESSMENT

Note that it is unlikely that one person will be able to complete all sections of the capability assessment alone. The primary preparer will likely need to reach out to other departments within the local government for information. It may be beneficial to provide these individuals with background information about this planning process, as input from them will be needed again during Phase 3 of the annex development.

Planning and Regulatory Capability

In the table titled “Planning and Regulatory Capability,” indicate “Yes” or “No” for each listed code, ordinance, requirement or planning document in each of the following columns:

- **Local Authority**—Enter “Yes” if your jurisdiction has prepared or adopted the identified item; otherwise, enter “No.” If yes, then enter the code, ordinance number, or plan name and its date of adoption in the comments column. *Note: If you enter yes, be sure to provide a comment with the appropriate code, ordinance or plan and date of adoption.*
- **Other Jurisdiction Authority**—Enter “Yes” if another agency (e.g., a state agency or special purpose district) enforces or administers the identified item in a way that may impact your jurisdiction or if any state or federal regulations or laws would prohibit local implementation of the identified item; otherwise, enter “No.” *Note: If you enter yes, be sure to provide a comment indicating the other agency and its relevant authority.*
- **State Mandated**—Enter “Yes” if state laws or other requirements enable or require the listed item to be implemented at the local level; otherwise, enter “No.” *Note: If you enter yes, be sure to provide a comment describing the relevant state mandate.*
- **Integration Opportunity**—Enter “Yes” if there are obvious ways that the code, ordinance or plan can be coordinated with the hazard mitigation plan. Consider the following:
 - If you answered “Yes” in the Local Authority column for this item, then enter “Yes” for integration opportunity if any of the following are true:
 - The item already addresses hazards and their impacts and should be updated to reflect new information about risk from this hazard mitigation plan
 - The item does not address hazards and their impacts but is due for an update in the next 5 years and could be updated in a way that does address hazards and impacts
 - The item identifies projects for implementation and these could be reviewed to determine if they can be modified to help address hazard mitigation goals
 - The item identifies projects for implementation and some of these should be considered for inclusion in the hazard mitigation action plan for your jurisdiction
 - If you answered “No” in the Local Authority column for this item, then enter “Yes” for integration opportunity if your jurisdiction will develop the item over the next 5 years

Note: Each capability with a “Yes” answer to Integration Opportunity will be discussed in more detail later in the annex. You may wish to keep notes when assessing the Integration Opportunity or review the “Integration with Other Planning Initiatives” section below.
- **Comments**—Enter the code number and adoption date for any local code indicated as being in place; provide other comments as appropriate to describe capabilities for each entry. **DO NOT OVERLOOK THIS STEP**

For the categories “General Plan” and “Capital Improvement Plan,” answer the specific questions shown, in addition to completing the four columns indicating level of capability.

Development and Permit Capability

Complete the table titled “Development and Permitting Capabilities.”

Fiscal Capability

Complete the table titled “Fiscal Capability” by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your use of this resource.

Administrative and Technical Capability

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title. If you have contract support with these capabilities, you can still answer “Yes.” Indicate in the department row that this resource is provided through contract.

Education and Outreach Capability

Complete the table titled “Education and Outreach.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the above capability assessment tables and consider including actions to provide a capability that your jurisdiction does not currently have, update a capability that your jurisdiction does have, or implement an action that is recommended in an existing plan or program.

National Flood Insurance Program Compliance

Complete the table titled “National Flood Insurance Program Compliance.”

Community Classifications

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in the third and fourth columns if your jurisdiction is not participating. If you do not know your current classification, information is available at the following websites:

- **FIPS Code**— <https://www.census.gov/geographies/reference-files/2018/demo/popest/2018-fips.html>

- **DUNS #**— <https://www.dnb.com/duns-number.html>
- **Community Rating System**— <https://www.fema.gov/floodplain-management/community-rating-system>
- **Building Code Effectiveness Grading Schedule**— <https://www.isomitigation.com/bcegs/iso-s-building-code-effectiveness-grading-schedule-bcegs.html>
- **Public Protection Classification**— <https://www.isomitigation.com/ppc/>
- **Storm Ready**— <https://www.weather.gov/stormready/communities>
- **Firewise**— <http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx>
- **Tsunami Ready**— <https://www.weather.gov/tsunamiready/communities>

INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. FEMA recommends integration as follows:

- Integrate hazard mitigation plan goals with community objectives (e.g. incorporate the goals for risk reduction and safety into the policies of other plans).
- Use the risk assessment to inform plans and policies (e.g. incorporate risk assessment findings into land use plans, site plan review, emergency operations plans).
- Implement mitigation actions through existing mechanisms (e.g. include mitigation projects in the capital improvement plan).
- Think about mitigation before and after a disaster (e.g. build recovery planning on existing mitigation plans and goals).

After reviewing the plans, programs and ordinances identified in the capability assessment tables, identify all plans and programs that have already been integrated with the hazard mitigation plan, and those that offer opportunities for future integration. The simplest way to do this is to review the Planning and Regulatory Capabilities table to see which items were marked as “Yes” under the Integration Opportunity column.

Existing Integration

In the highlighted bullet list, list items for which you entered “Yes” under the Integration Opportunity column of the “Planning and Regulatory Capability” table because the plan or ordinance already addresses potential impacts or includes specific projects that should be included as action items in the mitigation action plan. Consider listing items marked as Completed in the “Status of Previous Plan Actions” table if they were indicated as being ongoing actions. Provide a brief description of how the plan or ordinance is integrated. Examples are as follows:

- **Capital Improvement Plan**—The capital improvement plan includes projects that can help mitigate potential hazards. The City will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement projects and may result in modifications to proposed projects based on results of the risk assessment.

- **Building Code and Fire Code**—The City’s adoption of the 2016 California building and fire codes incorporated local modifications to account for the climatic, topographic and geographic conditions that exist in the City.
- **General Plan**—The general plan includes a Safety Element to protect the community from unreasonable risk by establishing policies and actions to avoid or minimize the following hazards:
 - Geologic and seismic hazards
 - Fire hazards
 - Hazardous materials
 - Flood control
 - Impacts from climate change.
- **Climate Action Plan**—The City’s Climate Action Plan includes projects for reducing greenhouse gas emissions and adapting to likely impacts of climate change. These projects were reviewed to identify cross-planning initiatives that serve both adaptation and mitigation objectives.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, any plans that fall into the “Existing Integration” category should be reviewed and elements from them should be included in the action plan as appropriate.

Opportunities for Future Integration

List any remaining items that say “Yes” in the Integration Opportunity column in the Planning and Regulatory Capabilities table and explain the process by which integration could occur. Examples follow:

- **Zoning Code**—The City is conducting a comprehensive update to its zoning code. Additional mitigation and abatement measures will be considered for incorporation into the code.
- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Post-Disaster Recovery Plan**—The City does not have a recovery plan and intends to develop one as a mitigation planning action during the next five years. The plan will build on the goals and objectives identified in the hazard mitigation plan.

After you have accounted for all items marked as “Yes” under the Integration Opportunity column, consider other programs you may have in place in your jurisdiction that include routine consideration and management of hazard risk. Examples of such programs may include: tree pruning programs, right-of-way mowing programs, erosion control or stream maintenance programs, etc. Add any such programs to the integration discussion and provide a brief description of how these programs manage (or could be adapted to manage) risk from hazards.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, an action to integrate any identified “Opportunities for Future Integration” should be considered for inclusion in the action plan.

INFORMATION SOURCES USED FOR THIS ANNEX

Note that this section will ultimately describe all information sources used to develop this annex, but that only the sources used for Phases 1 and 2 will be listed at this point. Additional sources will be added with the preparation of the Phase 3 annex.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but be sure to update and enhance any descriptions. Providing this information is a requirement to pass the state and FEMA review process.

PUBLIC OUTREACH

Note that this section is part of the Phase 3 annex, but documentation can begin in Phases 1 and 2 if applicable.

FEMA requirements for public outreach will be met by the County's engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

THIS COMPLETES PHASE 2

PHASE 3 INSTRUCTIONS

RISK ASSESSMENT

Jurisdiction-Specific Natural Hazard Event History

In the table titled “Past Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Refer to the table below that lists hazard events in the planning area as recognized by the County, the state, and the federal government.

Table 1. Presidential Disaster Declarations for the Planning Area

Incident Dates	FEMA Disaster # or Event Name	County Emergency Op. Center Activated	Gubernatorial Declaration	Presidential Declaration
1/20/2020 - continuing	DR-4534 COVID-19 Pandemic			✓
3/29 – 6/15/2017	DR-4342 Flooding			✓
2/9/2017 ^a	Record Snowfall		✓	✓
7/27 - 9/26/2000	DR-1341 Wildfires			✓
12/31/1964	DR-186 Heavy Rains & Flooding			✓
2/14/1963	DR-143 Flood			✓
2/14/1962	DR-120 Flood			✓
6/26/1961	DR-116 Flood			✓
7/22/1960	DR-105 Wildfires			✓
5/27/1957	DR-76 Flood			✓
4/21/1956	DR-55 Flood			✓

a. Declaration date

We recommend including most large-scale disasters, unless you know that there were no impacts on your jurisdiction. Specifically, we recommend that you include these events if you have damage estimate information or can provide a brief description of impacts that occurred within your community. In addition to these events, refer to the NOAA storm events database included in the toolkit. We recommend conducting a search for the name of your jurisdiction in order to identify events with known impacts. Other potential sources of damage information include the following

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Emergency management documents (general plan safety element, emergency response plan, etc.)
- Resident input.

If you do not have estimates for costs of damage caused, list “Not Available” in the “Damage Assessment” column or list a brief description of the damage rather than a dollar value (e.g., Main Street closed as a result of flooding, downed trees and residential damage). Note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

Hazard Risk Ranking

Risk ranking identifies which hazards pose the greatest risk to the community, based on how likely it is for each hazard to occur (this is called the community's exposure) and how great an impact each hazard will have if it does occur (this is called the community's vulnerability). Every jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area. The risk ranking for each jurisdiction has been calculated in the "Loss Matrix" spreadsheet included in the annex preparation toolkit. The ranking is on the basis of risk ranking scores for each hazard that were calculated based on the hazard's probability of occurrence and its potential impact on people, property and the economy.

The results for your jurisdiction have already been entered into the "Hazard Risk Ranking" table in your Phase 3 annex template. The hazard with the highest risk rating is listed at the top of table and was given a rank of 1; the hazard with the second highest rating is listed second with a rank of 2; and so on. Two hazards with equal risk ranking scores were given the same rank. Hazards were assigned to "High," "Medium," or "Low" risk categories based on the risk ranking score. If you wish to review the calculations in detail, the appendix at the end of these instructions describes the calculation methodology that the spreadsheet uses.

Review the hazard risk ranking information that is included in your annex. If these results differ from what you know based on substantiated data and documentation, you may alter the ranking and risk categories based on this knowledge. If you do so, indicate the reason for the change in your template. For example:

"Drought was ranked as low; however, the jurisdiction's economy is heavily reliant on water-using industries, such as agriculture or manufacturing, so this hazard should be ranked as medium."

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, you will need to have at least one mitigation action for each hazard ranked as "high."

Jurisdiction-Specific Vulnerabilities

Repetitive Loss Properties

A repetitive loss property is any property for which FEMA has paid two or more flood insurance claims in excess of \$1,000 in any rolling 10-year period since 1978. In the space provided, the following information has been included in your annex based on data provided by FEMA:

- The number of any FEMA-identified repetitive-loss properties in your jurisdiction.
- The number of any FEMA-identified severe-repetitive-loss properties in your jurisdiction.
- The number (if any) of repetitive-loss or severe-repetitive-loss properties in your jurisdiction that have been mitigated. Mitigated for this exercise means that flood protection has been provided to the structure.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, if your jurisdiction has any repetitive loss properties, you should strongly consider including a mitigation action that addresses mitigating these properties.

Other Noted Vulnerabilities

Review the results of the risk assessment included in the toolkit, your jurisdiction's natural events history, and any relevant public comments/input, then develop a few sentences that discuss specific hazard vulnerabilities. You do not need to develop a sentence for every hazard, but identify a few issues you would like to highlight. Also list any known hazard vulnerabilities in your jurisdiction that may not be apparent from the risk assessment and other information provided.

Spending some time thinking about the results of the risk assessment and other noted vulnerabilities will be a big help in the development of your hazard mitigation action plan. The following are examples of vulnerabilities you could identify through this exercise:

- About 45 percent of the population lives in the 0.2 percent annual chance flood hazard area, where flood insurance is generally not required.
- A magnitude 7.5 earthquake on the Smithburg Fault is estimated to produce nearly 1 million tons of structure debris.
- Over the past 10 years, the jurisdiction has experienced more than \$6 million in damage from severe storm events.
- More than 50 buildings are located in areas that would be permanently inundated with 12 inches of sea level rise.
- The results of the public survey indicated that 40 percent of Smithburg residents would not be able to be self-sufficient for 5 days following a major event.
- An urban drainage issue at a specific location results in localized flooding every time it rains.
- One area of the community frequently loses power due to a lack of tree maintenance.
- A critical facility, such as a police station, is not equipped with a generator.
- A neighborhood has the potential to have ingress and egress cut off as the result of a flood or earthquake (e.g. a bridge is the only access).
- Substantial number of buildings in one area of the community are unreinforced masonry or soft-story construction.
- An area along the river is eroding and threatening public and/or private property.

- A large visitor population that may not be aware of tsunami risk.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, consider including actions to address the jurisdiction-specific vulnerabilities listed in this section.

HAZARD MITIGATION ACTION PLAN

Hazard Mitigation Action Plan Matrix

The hazard mitigation action plan is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan.

Select Recommended Actions

All of the work that you have done thus far should provide you with ideas for actions. Throughout these instructions, green boxes labeled “Hazard Mitigation Action Plan Input” have indicated information that needs to be considered in the selection of mitigation actions. The following sections describe how to consider these and other information sources to develop a list of potential actions.

Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify actions where benefits exceed costs.
- Include any action that your jurisdiction has committed to pursuing, regardless of grant eligibility.
- Know what is and is not grant-eligible under various federal grant programs (see the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table below).

Table 2. Federal Hazard Mitigation Grant Program Eligibility by Action Type

Eligible Activities	HMGP (Hazard Mitigation Grant Program)	BRIC (Building Resilient Infrastructure and Communities)	FMA (Flood Mitigation Assistance)
Mitigation Projects			
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction	√	√	√
Dry Floodproofing of Historic Residential Structures	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Generators	√	√	
Localized Flood Risk Reduction Projects	√	√	√
Non-Localized Flood Risk Reduction Projects	√	√	

Eligible Activities	HMGP (Hazard Mitigation Grant Program)	BRIC (Building Resilient Infrastructure and Communities)	FMA (Flood Mitigation Assistance)
Structural Retrofitting of Existing Buildings	√	√	√
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Wind Retrofit for One- and Two-Family Residences	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildland fire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Advance Assistance	√		
5 Percent Initiative Projects*	√		
Aquifer and Storage Recovery**	√	√	√
Flood Diversion and Storage**	√	√	√
Floodplain and Stream Restoration**	√	√	√
Green Infrastructure**	√	√	√
Miscellaneous/Other**	√	√	√
Hazard Mitigation Planning	√	√	√
Technical Assistance			√
Management Costs	√	√	√

* FEMA allows increasing the 5% initiative amount under the Hazard Mitigation Grant Program up to 10% for a presidential major disaster declaration. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

** Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

Material Previously Developed for This Annex

Capability Assessment Section—Planning and Regulatory Capability Table, Fiscal Capability Table, Administrative and Technical Capability Table, Education and Outreach Table, and Community Classification Table

Review these tables and consider the following:

- For any capability that you do not currently have, consider whether your jurisdiction should have this capability. If so, consider including an action to develop/acquire the capability.
- For any capability that you do currently have, consider whether this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- If any capabilities listed in the Planning and Regulatory Capabilities table have not been updated in more than 10 years, consider an action to review and update the capability and, as appropriate, incorporate hazard mitigation principles or information obtained in the risk assessment.

- Consider including actions that are identified in other plans and programs (capital improvement plans, strategic plans, etc.) as actions in this plan.

Capability Assessment Section—National Flood Insurance Program Compliance table

Review the table and consider the following:

- If you have no certified floodplain managers and you have flood risk, consider adding an action to provide key staff members with training to obtain certification.
- If your flood damage prevention was last updated in or before 2004, you should identify an action to update your ordinance to ensure it is compliant with current NFIP requirements.
- If you have any outstanding NFIP compliance issues, be sure to add an action to address them.
- If flood hazard maps do not adequately address the flood risk within your jurisdiction, consider actions to request new mapping or conduct studies.
- If you wish to begin to participate in CRS or you already to participate and would like to improve your classification, consider this as an action.
- If the number of flood insurance policies in your jurisdiction is low relative to the number of structures in the floodplain, consider an action that will promote flood insurance in your jurisdiction.

Capability Assessment Section— Adaptive Capacity for Climate Change Table

Consider your responses to this section:

- For criteria that you listed as medium or low, think of ways you could improve this rating (see adaptive capacity portion of the mitigation best practices catalog).
- For criteria you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity.
- For criteria that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices and adaptive capacity catalog).

Integration Review Section

Review the items you identified in this section and consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated. For items that address land use, include them in the prepopulated action in your template that reads as follows:

“Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including _____.”

Risk Ranking Section

You must identify at least one mitigation action that is clearly defined and actionable (i.e. not a preparedness or response action) for every hazard that is categorized in the risk ranking as “high” or “medium” risk.

Jurisdiction-Specific Vulnerabilities Section

Review the vulnerability issues that you identified in this section and consider actions to address them (see mitigation best practices catalog). Two examples are shown in the table below.

Table 3. Example Actions to Address Jurisdiction-Specific Vulnerabilities

Noted Vulnerability	Example Mitigation Action
<p>About 45 percent of the population lives in the 0.2 percent annual chance flood hazard area where flood insurance is generally not required.</p>	<p>Implement an annual public information initiative that targets residents in the 0.2 percent annual chance flood hazard area. Provide information on the availability of relatively low cost flood insurance policies.</p>
<p>An urban drainage issue results in localized flooding every time it rains.</p>	<p>Replace undersized culverts that are contributing to localized flooding. Priority areas include:</p> <ul style="list-style-type: none"> • The corner of Main Street and 1st Street • Old Oak subdivision.

Status of Previous Plan Actions Section

If your jurisdiction participated in a previous hazard mitigation plan, be sure to include any actions that were identified as “carry over” actions.

Other Sources

Mitigation Best Practices Catalog

A catalog that includes best practices identified by FEMA and other agencies, as well as recommendations from the steering committee and other stakeholders, is included in your toolkit. Review the catalog and identify actions your jurisdiction should consider for its action plan.

Public Input

Review input received during the process, specifically the public survey results included in your toolkit.

Common Actions for All Partners

The following six actions have been prepopulated in your annex template; **these six actions should be included in every annex and should not be removed:**

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas, prioritizing those structures that have experienced repetitive losses and/or are located in high or medium ranked hazard.
- Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.
- Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.
- Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:
 - Enforce the flood damage prevention ordinance.
 - Participate in floodplain identification and mapping updates.
 - Provide public assistance/information on floodplain requirements and impacts.

- Identify and pursue strategies to increase adaptive capacity to climate change.
- Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

In addition, the core planning team recommends that every planning partner strongly consider the following actions:

- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Develop a post-disaster recovery plan and a debris management plan.
- Develop and/or update plans that support or enhance continuity of operations following disasters.

The specifics of all these common actions should be adjusted as needed for the particulars of each community.

Complete the Table

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified and would like to include in the plan:

- Enter the action number (see box on next page) and description. **If the action is carried over from your previous hazard mitigation plan, return to the “Status of Previous Plan Actions” table you completed in Phase 1 and enter the new action number in the column labeled “Action # in Update.”**
- Indicate whether the action mitigates hazards for new and/or existing assets.
- Identify the specific hazards the action will mitigate (note: you must list each hazard by name; simply indicating “all hazards” is not deemed acceptable).
- Identify by number the mitigation plan objectives that the action addresses (see toolkit).
- Indicate who will be the lead in administering the action. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department as responsible for the action, clearly identify one as the lead agency and list the others in the “supporting agency” column.
- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium,” or “Low,” as determined for the prioritization process described in the following section.
- Identify funding sources for the action. If it is a grant, include the grant-providing agency as well as funding sources for any required cost share. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table on page 13 of these instructions for project eligibility for FEMA’s hazard mitigation assistance grant programs.

Action Numbering

Actions are to be numbered using the letter code for your jurisdiction shown below, followed by a hyphen and the action’s sequential number:

- Ada County—AC-1, AC-2...
- City of Boise—B-1, B-2...
- City of Eagle—E-1, E-2...
- City of Garden City—GC-1, GC-2...
- City of Kuna—K-1, K-2...
- City of Meridian—M-1, M-2...
- City of Star—S-1, S-2...

- Indicate the time line as “short-term” (1 to 5 years) or “long-term” (5 years or greater) or “ongoing” (a continual program)

Mitigation Action Priority

Complete the information in the table titled “Mitigation Action Priority” as follows:

- **Action #**—Indicate the action number from the Hazard Mitigation Action Plan Matrix table.
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
 - High—Action will provide an immediate reduction of risk exposure for life and property.
 - Medium—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
 - Low—Long-term benefits of the action are difficult to quantify in the short term.
- **Cost**—Enter “High,” “Medium” or “Low” as follows:
 - High—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
 - Medium—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - Low—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
- **Is the Action Grant-Eligible?**—Enter “Yes” or “No.” Refer to the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table on page 13 of these instructions.
- **Can Action Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another source such as grants?
- **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
 - Medium Priority—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
 - Low Priority—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known grant funding. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for grant funding from programs that have not yet been identified.
- **Grant Pursuit Priority**— Enter “High,” “Medium” or “Low” as follows:

- High Priority—An action that meets identified grant eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible for grant funding.
- Medium Priority—An action that meets identified grant eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
- Low Priority—An action that has not been identified as meeting any grant eligibility requirements.

Actions identified as high-grant-pursuit priority actions should be closely reviewed for consideration when grant funding opportunities arise.

Note: If a jurisdiction wishes to identify an action as high priority that is outside of the prioritization scheme for high priorities, a note indicating so should be inserted and a rationale should be provided.

Analysis of Mitigation Actions

In the table titled “Analysis of Mitigation Actions,” for each combination of hazard type and mitigation type, enter the numbers of all recommended actions that address that hazard type and can be categorized as that mitigation type. The mitigation types are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilience**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions. This table must show at least one action to address each “high” and “medium” ranked hazard. Planning partners should aim to identify at least one action for each mitigation type, but this is not required.

An example of a completed “Analysis of Mitigation Actions” table is provided below. Note that an action can be more than one mitigation type.

Sample Completed Table – Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11			EX-3, 4, 8, 9, 10
Drought	EX-2	EX-1	EX-4					EX-3, 4, 8, 9, 10
Medium-Risk Hazards								
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11	EX-6		EX-3, 4, 8, 9, 10
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9, 10
Low-Risk Hazards								
Severe Weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11		EX-8, 7	EX-3, 4, 8, 9, 10
Wildfire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11			EX-3, 4, 8, 9, 10

PUBLIC OUTREACH

FEMA requirements for public outreach will be met by the County’s engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

This section should describe what resources you used to complete the annex and how you used them. The sources used for Phases 1 and 2 should have been entered previously. List any additional sources used for the preparation of the Phase 3 annex. Review to ensure that all materials used in all three phases are identified. Providing this information is a requirement to pass the state and FEMA review process.

FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. **This section is optional.**

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. **This section is optional.**

THIS COMPLETES PHASE 3

APPENDIX— Risk Ranking Calculation Methodology

The instructions below describe the methodology for how risk rankings were derived in the “Loss Matrix” spreadsheet provided with the annex preparation toolkit. The risk-ranking for each hazard assessed its probability of occurrence and its potential impact on people, property, and the economy. Refer to the Loss Matrix spreadsheet in order to follow along.

Probability of Occurrence

A probability factor is assigned based on how often a hazard is likely to occur. The probability of occurrence of a hazard event is generally based on past hazard events in an area, although weight can be given to expected future probability of occurrence based on established return intervals and changing climate conditions. For example, if your jurisdiction has experienced two damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your jurisdiction has experienced no damage from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category. Each hazard was assigned a probability factor as follows:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- None—There is no exposure to the hazard and no probability of occurrence (Probability Factor = 0)

Potential Impacts of Each Hazard

The impact of each hazard is divided into three categories: impacts on people, impacts on property, and impacts on the economy. These categories are also assigned weighted values. Impact on people was assigned a weighting factor of 3, impact on property was assigned a weighting factor of 2 and impact on the economy was assigned a weighting factor of 1.

Impact factors for each category (people, property, economy) are described below:

- **People**—Values are assigned based on the percentage of the total *population exposed* to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. Impact factors were assigned as follows:
 - High—25 percent or more of the population is exposed to a hazard (Impact Factor = 3)
 - Medium—10 percent to 24 percent of the population is exposed to a hazard (Impact Factor = 2)
 - Low—9 percent or less of the population is exposed to the hazard (Impact Factor = 1)
 - No impact—None of the population is exposed to a hazard (Impact Factor = 0)
- **Property**—Values are assigned based on the percentage of the total *property value exposed* to the hazard event:
 - High—25 percent or more of the total replacement value is exposed to a hazard (Impact Factor = 3)
 - Medium—10 percent to 24 percent of the total replacement value is exposed to a hazard (Impact Factor = 2)
 - Low—9 percent or less of the total replacement value is exposed to the hazard (Impact Factor = 1)

- No impact—None of the total replacement value is exposed to a hazard (Impact Factor = 0)
- **Economy**—Values were assigned based on the percentage of the total *property value vulnerable* to the hazard event. Values represent estimates of the loss from a major event of each hazard in comparison to the total replacement value of the property exposed to the hazard. For some hazards, such as wildland fire and landslide, vulnerability may be considered to be the same or a portion of exposure due to the lack of loss estimation tools specific to those hazards.
 - High—Estimated loss from the hazard is 10 percent or more of the total replacement value (Impact Factor = 3)
 - Medium—Estimated loss from the hazard is 5 percent to 9 percent of the total replacement value (Impact Factor = 2)
 - Low—Estimated loss from the hazard is 4 percent or less of the total replacement value (Impact Factor = 1)
 - No impact—No loss is estimated from the hazard (Impact Factor = 0).

Impacts on People

The percent of the total population exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **green highlighted column**. For those hazards that do not have a defined extent and location the entire population or a portion of the population is considered to be exposed, depending on the hazard. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all people in the planning area would be exposed to drought, but impacts to the health and safety of individuals are expected to be minimal.

Impacts on Property

The percent of the total value exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **blue highlighted column**. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire building stock is generally considered to be exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all structures in the planning area would be exposed to drought, but impacts to structures are expected to be minimal.

Impacts on the Economy

The loss estimates for each hazard of concern that was modeled (i.e. dam failure, flood, earthquake) can be found in the loss estimate matrix in the **orange highlighted column**. For those hazards that have a defined extent and location, but do not have modelled loss results, loss estimates can be the same as exposure or a portion thereof. For example, a large percentage of the building stock may be exposed to landslide or wildland fire risk, but it would not be expected that one event that resulted in loss to all exposed structures would occur. For those hazards that do not have a defined extent and location, exposure is based on the hazard type.

Risk Rating for Each Hazard

A risk rating for each hazard was determined by multiplying the assigned probability factor by the sum of the weighted impact factors for people, property and the economy:

$$\text{Risk Rating} = \text{Probability Factor} \times \text{Weighted Impact Factor \{people + property + economy\}}$$

This is the number that is shown in the risk ranking table in your template. Generally, score of 30 or greater receive a “high” rating, score between 15 and 30 receive a “medium” rating, and score of less than 15 receives a “low” rating.

Municipal Annex Template

1. JURISDICTION NAME

1.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

Alternate Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Hazard Mitigation Planning Team Members

Name	Title

1.2 JURISDICTION PROFILE

1.2.1 Location and Features

[jurisdiction name] is in [general location description]

The current boundaries generally extend from [describe], encompassing an area of [area in square miles].

[general description of key features]

1.2.2 History

[jurisdiction name] was incorporated in [date]. [brief historical summary]

1.2.3 Governing Body Format

[general description].

The [name of adopting body] assumes responsibility for the adoption of this plan; [name of oversight agency] will oversee its implementation.

1.3 CURRENT TRENDS

1.3.1 Population

According to [identify data source], the population of [jurisdiction name] as of [month year] was [population]. Since [year], the population has grown at an average annual rate of [number] percent.

1.3.2 Development

DESCRIBE TRENDS IN GENERAL.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 1-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 1-2. Recent and Expected Future Development Trends

Criterion	Response																														
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	Yes/No [redacted]																														
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses. If yes, who currently has permitting authority over these areas?</i>	Yes/No [redacted]																														
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	Yes/No [redacted]																														
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	<table border="1"> <thead> <tr> <th></th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Single Family</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> </tr> <tr> <td>Multi-Family</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> </tr> <tr> <td>Other</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> </tr> <tr> <td>Total</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> <td>[redacted]</td> </tr> </tbody> </table>		2016	2017	2018	2019	2020	Single Family	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Multi-Family	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Other	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	2016	2017	2018	2019	2020																										
Single Family	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]																										
Multi-Family	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]																										
Other	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]																										
Total	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]																										
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none"> • Special Flood Hazard Areas: # • Landslide: # • High Liquefaction Areas: # • Tsunami Inundation Area: # • Wildfire Risk Areas: # 																														

Criterion	Response
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	

1.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 1-3.
- Development and permitting capabilities are presented in Table 1-4.
- An assessment of fiscal capabilities is presented in Table 1-5.
- An assessment of administrative and technical capabilities is presented in Table 1-6.
- An assessment of education and outreach capabilities is presented in Table 1-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-8.
- Classifications under various community mitigation programs are presented in Table 1-9.

Table 1-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Zoning Code <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Subdivisions <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Stormwater Management <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Post-Disaster Recovery <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Real Estate Disclosure <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Growth Management <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Site Plan Review <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Environmental Protection <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Flood Damage Prevention <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Emergency Management <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Climate Change <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Other <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Planning Documents				
General Plan <i>Is the plan compliant with Assembly Bill 2140? Yes/No</i> <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Capital Improvement Plan <i>How often is the plan updated? [Redacted]</i> <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Disaster Debris Management Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Floodplain or Watershed Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Stormwater Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Urban Water Management Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Habitat Conservation Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Economic Development Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Shoreline Management Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Community Wildfire Protection Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Forest Management Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Climate Action Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Comprehensive Emergency Management Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Post-Disaster Recovery Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Continuity of Operations Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Public Health Plan <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No
Other <i>Comment: Enter Comment</i>	Yes/No	Yes/No	Yes/No	Yes/No

Table 1-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i> Enter Response	Yes/No
Does your jurisdiction have the ability to track permits by hazard area?	Yes/No
Does your jurisdiction have a buildable lands inventory?	Yes/No

Table 1-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes/No
Capital Improvements Project Funding	Yes/No
Authority to Levy Taxes for Specific Purposes	Yes/No
User Fees for Water, Sewer, Gas or Electric Service	Yes/No
<i>If yes, specify:</i> Enter Response	
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
Withhold Public Expenditures in Hazard-Prone Areas	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Other	Yes/No
<i>If yes, specify:</i> Enter Response	

Table 1-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Engineers or professionals trained in building or infrastructure construction practices	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Planners or engineers with an understanding of natural hazards	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Staff with training in benefit/cost analysis	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Surveyors	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Personnel skilled or trained in GIS applications	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Scientist familiar with natural hazards in local area	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Emergency manager	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Grant writers	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Other	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	

Table 1-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes/No
Do you have personnel skilled or trained in website development?	Yes/No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Enter Response	Yes/No

Table 1-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Enter Response
Who is your floodplain administrator? (department/position)	Enter Response
Are any certified floodplain managers on staff in your jurisdiction?	Yes/No
What is the date that your flood damage prevention ordinance was last amended?	Enter Response
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> Enter Response	Meets/Exceeds
When was the most recent Community Assistance Visit or Community Assistance Contact?	Enter Response
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i> Enter Response	Yes/No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i> Enter Response	Yes/No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i> Enter Response	Yes/No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> Enter Response	Yes/No
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> Yes/No <i>If no, is your jurisdiction interested in joining the CRS program?</i> Yes/No	Yes/No
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> \$ <input type="text"/> <i>What is the premium in force?</i> \$ <input type="text"/>	Enter Response

Criterion	Response
How many total loss claims have been filed in your jurisdiction? ^a	Enter Response
How many claims are still open or were closed without payment?	Enter Response
What were the total payments for losses? \$ _____	
a. According to FEMA statistics as of MONTH XX, 20XX	

Table 1-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes/No		Date
DUNS #	Yes/No		Date
Community Rating System	Yes/No		Date
Building Code Effectiveness Grading Schedule	Yes/No		Date
Public Protection	Yes/No		Date
Storm Ready	Yes/No		Date
Firewise	Yes/No		Date
Tsunami Ready	Yes/No		Date

1.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

1.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

1.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this

plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan presented in this annex.

1.6 RISK ASSESSMENT

1.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 1-10 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 1-10. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$

1.6.2 Hazard Risk Ranking

Table 1-11 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 1-11. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1			High/Medium/Low
2			High/Medium/Low
3			High/Medium/Low
4			High/Medium/Low
5			High/Medium/Low
6			High/Medium/Low
7			High/Medium/Low
8			High/Medium/Low
9			High/Medium/Low

1.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: XX
- Number of FEMA-identified Severe-Repetitive-Loss Properties: XX
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: XX

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Insert as appropriate.
- Insert as appropriate.
- Insert as appropriate.

Mitigation actions addressing these issues were prioritized for consideration in the action plan presented in this annex.

1.7 STATUS OF PREVIOUS PLAN ACTIONS

If your jurisdiction has no previous hazard mitigation plan, please enter an “X” in the box at right and do not complete this section.

Table 1-12 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 1-12. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Insert Action Number & Text <i>Comment: Enter Comment</i>				
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1.8 HAZARD MITIGATION ACTION PLAN

Table 1-13 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 1-14 identifies the priority for each action. Table 1-15 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-13. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. <i>Hazards Mitigated:</i> Enter Response						
Existing	Enter Response	Enter Response	Enter Response	High	HMGP, PDM, FMA	Short-term
Action xxx-2 — Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including [redacted] <i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Ongoing
Action xxx-3 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. <i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Short-term
Action xxx-4 —Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements: <ul style="list-style-type: none"> • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts. <i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Ongoing
Action xxx-5 —Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following: <ul style="list-style-type: none"> • [redacted] <i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Short-term
Action xxx-6 — Purchase generators for critical facilities and infrastructure that lack adequate backup power, including [redacted] <i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
Existing	Enter Response	Enter Response	Enter Response			
Action xxx-7 —Description <i>Hazards Mitigated:</i> Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response						
Action xxx-8 —Description <i>Hazards Mitigated:</i> Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response						
Action xxx-9 —Description <i>Hazards Mitigated:</i> Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response						
Action xxx-10 —Description <i>Hazards Mitigated:</i> Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response Enter Response						

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-11—Description						
Hazards Mitigated: Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date
 Acronyms used here are defined at the beginning of this volume.

Table 1-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	No	Yes	High	Low
3	3	Low	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	7	Medium	Low	Yes	No	Yes	High	Medium
6	3	High	Medium	Yes	Yes	No	Medium	High
7								
8								
9								
10								
11								

a. See the introduction to this volume for explanation of priorities.

Table 1-15. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Medium-Risk Hazards								

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
Low-Risk Hazards								
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

a. See the introduction to this volume for explanation of mitigation types.

1.9 PUBLIC OUTREACH

Table 1-16 lists public outreach activities for this jurisdiction.

Local Outreach Activity	Date	Number of People Involved
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

1.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **[redacted] Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **[redacted] Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.
- <INSERT DOCUMENT AND DESCRIPTION OF HOW IT WAS USED>

1.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

1.12 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section

Instructions for Completing Special-Purpose District Annex Template

INSTRUCTIONS FOR COMPLETING SPECIAL-PURPOSE DISTRICT ANNEX TEMPLATE

Jurisdictional annex templates for the 2022 *Ada County Hazard Mitigation Plan* update will be completed in three phases. **This document provides instructions for completing Phase 3 of the template for special-purpose districts.**

The target timeline for completion is as follows:

- **Phase 1**—Team, Profile, Trends, and Previous Plan Status
 - **Deploy:** July 19, 2021
 - **Due:** September 3, 2021 by close of business
- **Phase 2**—Capability Assessment, Integration Review, and Information Sources
 - **Deploy:** September 27, 2021
 - **Due:** November 12, 2021 by close of business
- **Phase 3**—Risk Assessment, Action Plan, Information Sources, Future Needs, and Additional Comments
 - **Deploy:** April 12, 2022
 - **Mandatory Phase 3 Workshops:** Targeted for the week of April 11. We will schedule multiple workshops during that week to provide options for attendance
 - **Due:** May 13, 2022 by close of business, Mountain Time

Please direct any questions and return your completed Phase 3 template in electronic format to:

Megan Brotherton
Tetra Tech
Phone: (808) 339-9119
E-mail: megan.brotherton@tetrattech.com

A Note About Formatting

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner.

Content should be entered directly into the template rather than creating text in another document and pasting it into the template. Text from another source may alter the formatting of the document.

The section and table numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of the numbering.

For planning partners who participated in the 2017 planning effort, relevant information has been brought over to the 2022 template. Fields that require attention have been highlighted using the following color coding:

- **Yellow:** Text has been brought over from 2017 Plan and should be reviewed and updated as needed.
- **Green:** This is a new field that will require information that was not included in 2017.

Please un-highlight each field that you update so that reviewers will know an edit has been made.

New planning partners will need to complete the template in its entirety.

IMPORTANT! READ THIS FIRST

Phase 1 and Phase 2 templates were previously provided to your jurisdiction for completion.

If your jurisdiction returned the completed Phase 1 & 2 templates:

- The Phase 1 & 2 content you provided is already incorporated into your Phase 3 template.
- Review the template to see if we have inserted any comments requesting further work to be done on Phase 1 or 2
 - ***If any comments are included, address them.*** Then, begin your work on Phase 3 following the Phase 3 instructions beginning on page 11.
 - If no comments are included, then you **DO NOT** need to do any further work on the Phase 1 or Phase 2 content. ***Go directly to the instructions for Phase 3, beginning on page 11.***

If your jurisdiction has **NOT** yet done any work on the Phase 1 or Phase 2 template:

- Follow the instructions beginning on page 3 for providing the Phase 1 and Phase 2 information.
- Then proceed with the Phase 3 instructions beginning on page 11.

If your jurisdiction started work on the Phase 1 or 2 template but never completed and submitted it, copy the work you had completed so far into the new template. Then complete Phases 1, 2, and 3 following the instructions provided here.

PHASE 1 INSTRUCTIONS

CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your district (e.g. West County Fire Protection District #1, Johnsonville Flood Protection District). Do not change the chapter number. Revise only the jurisdiction name. If your jurisdiction's name has already been entered, verify that wording and spelling are correct; revise as needed.

LOCAL HAZARD MITIGATION PLANNING TEAM

Points of Contact

Provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating, and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

Note: Both of these contacts should match the contacts that were designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, let the planning team know by inserting a comment into the document.

Participating Planning Team

Populate Table 1-1 with the names of staff from your jurisdiction who participated in preparing this annex or otherwise contributed to the planning process for this hazard mitigation plan.

JURISDICTION PROFILE

Overview

Provide a brief summary description of the following:

- The purpose of the jurisdiction
- The date of inception
- The type of organization
- The number of employees
- Funding sources
- The type of governing body, and who has adoptive authority.

This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District is a special district created in 1952 to provide water and sewer service. A five-member elected Board of Directors governs the District. The Board assumes responsibility for the adoption of this plan; the General Manager will oversee its implementation. The District currently employs a staff of 21. Funding comes primarily through rates and revenue bonds.*

Service Area

Provide a brief description of the following:

- Who the District’s customers are and an approximation of how many are currently served
- The area served, in square miles
- The geographic extent of the service area

This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District serves unincorporated areas of Jones County east of the City of Smithburg, including the communities of Johnsonville, Creeks Corner, Jones Hill, Fields Landing, King Salmon, and Freshwater. The current total service area is 3.3 square miles. As of April 30, 2020, the District serves 7,305 water connections and 6,108 sewer connections.*

Assets

List District-owned assets in the categories shown on the table (and described in the sections below). Include an approximate value for each asset and a subtotal value for identified assets in each category.

If District GIS data files are available, please send with your completed Phase 1. The files should include GIS data for the critical facilities and infrastructure that are identified in the assets table, including the name of the facility and what it is (e.g. “1.5MG water tank”).

Property

Provide an approximate value for any land owned by the District.

Equipment

List equipment owned by the District that is used in times of emergency or that, if incapacitated, could severely impact the service area (vehicles, generators, pumps, etc.). Provide an approximate replacement value for each item. Equipment of similar type may be listed as a single category (e.g., “3 diesel-powered generators”). For water and sewer districts, include mileage of pipeline under this category.

Critical Facilities

List District-owned facilities that are vital to maintain services to the service area. Include the address of each facility. Provide an approximate replacement value for each line. Critical facilities are generally defined as facilities owned by the District that are critical to District operations and to public health or safety and that are especially important following hazard events, including but not limited to the following:

- Structures or facilities that produce, use, or store hazardous materials (highly volatile, flammable, explosive, toxic and/or water-reactive materials)
- Hospitals, nursing homes, and housing facilities likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a natural hazard event
- Mass gathering facilities that may be used as evacuation shelters (such as schools or community centers)
- Transportation infrastructure such as roads, bridges and airports that provide sources for evacuation before, during and after natural hazard events
- Police stations, fire stations, government facilities, vehicle equipment and storage facilities, and emergency operation centers that are needed for response activities before, during and after a natural hazard event
- Public utility facilities such as drinking water, stormwater, and wastewater systems that are vital to providing normal services to damaged areas before, during and after natural hazard events.

The table below shows an example of assets to be listed in this section.

Sample Completed Table – Special District Assets	
Asset	Value
Property	
11.5 Acres	\$5,750,000
Equipment	
Total length of pipe 40 miles (\$1.32 million per mile X 40 miles)	\$52,800,000
4 Emergency Generators	\$250,000
Total:	\$53,050,000
Critical Facilities	
Administrative Buildings – 357 S. Jones Street	\$2,750,000
Philips Pump Station – 111 Fifth Avenue N.	\$377,000
Total:	\$3,127,000

NOTE: Placeholders in the table of assets request **ADDRESSES** for critical facilities. These addresses will not be included in the final published annex, but are needed in order to perform risk mapping and risk analysis for the hazard mitigation plan. Include the addresses in the table if convenient. If not, then provide a separate document listing all critical facilities and addresses for use in development of the hazard mitigation plan.

CURRENT TRENDS

Provide a brief description of previous growth trends in the service area and anticipated future increase or decrease in services (if applicable). This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District originally was formed to serve only the Johnsonville area. The District's service area expanded throughout the years to include the full area served today. Total customers have increased by 3 percent since 2010. Population in the service area is not projected to change significantly over the next 10 years, and the District has no plans to expand its service area.*

PUBLIC OUTREACH

Note that this section is part of the Phase 3 annex, but documentation can begin in Phase 1 if applicable.

FEMA requirements for public outreach will be met by the County's engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of this hazard mitigation plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

THIS COMPLETES PHASE 1

PHASE 2 INSTRUCTIONS

CAPABILITY ASSESSMENT

Note that it is unlikely that one person will be able to complete all sections of the capability assessment alone. The primary preparer will likely need to reach out to other departments within the local government for information. It may be beneficial to provide these individuals with background information about this planning process, as input from them will be needed again during Phase 3 of the annex development.

Planning and Regulatory Capability

List any federal, state, local or district ordinances, plans, or policies that apply to your jurisdiction and relate to hazard mitigation. Provide the date of last update and any comments as appropriate. The table below shows an example of items to be listed in this section.

Sample Completed Table – Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
District Design Standards	2010	
Capital Improvement Program	Updated annually	covers 5 year timeframe
Emergency Operations Plan	2000	
Facility Maintenance Manual	1990	
State Building Code	2016	
Division of State Architects		Review of all building and site design features is required prior to construction

Fiscal Capability

Complete the table titled “Fiscal Capability” by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your use of this resource.

Administrative and Technical Capability

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title. If you have contract support with these capabilities, you can still answer “Yes.” Indicate in the department row that this resource is provided through contract.

Education and Outreach Capability

Complete the table titled “Education and Outreach.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the above capability assessment tables and consider including actions to provide a capability that your jurisdiction does not currently have, update a capability that your jurisdiction does have, or implement an action that is recommended in an existing plan or program.

Community Classifications

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in the third and fourth columns if your jurisdiction is not participating. If you do not know your current classification, information is available at the following websites:

- **FIPS Code**— <https://www.census.gov/geographies/reference-files/2018/demo/popest/2018-fips.html>
- **DUNS #**— <https://www.dnb.com/duns-number.html>
- **Community Rating System**— <https://www.fema.gov/floodplain-management/community-rating-system>
- **Building Code Effectiveness Grading Schedule**— <https://www.isomitigation.com/bcegs/iso-s-building-code-effectiveness-grading-schedule-bcegs.html>
- **Public Protection Classification**— <https://www.isomitigation.com/ppc/>
- **Storm Ready**— <https://www.weather.gov/stormready/communities>
- **Firewise**— <http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx>
- **Tsunami Ready**— <https://www.weather.gov/tsunamiready/communities>

INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. FEMA recommends integration as follows:

- Integrate hazard mitigation plan goals with community objectives (e.g. incorporate the goals for risk reduction and safety into the policies of other plans).
- Use the risk assessment to inform plans and policies (e.g. incorporate risk assessment findings into emergency operations plans).
- Implement mitigation actions through existing mechanisms (e.g. include mitigation projects in the capital improvement plan).
- Think about mitigation before and after a disaster (e.g. build recovery planning on existing mitigation plans and goals).

After reviewing the plans, programs and ordinances identified in the capability assessment tables, identify all plans and programs that have already been integrated with the hazard mitigation plan, and those that offer opportunities for future integration.

Existing Integration

In the highlighted bullet list, provide a brief description of integrated plans or ordinances and how each is integrated. Consider listing items marked as Completed in the “Status of Previous Plan Actions” table if they were indicated as being ongoing actions. Examples are as follows:

- **Capital Improvement Plan**—The capital improvement plan includes projects that can help mitigate potential hazards. The District will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement projects and may result in modifications to proposed projects based on results of the risk assessment.
- **Emergency Operations Plan**—The results of the risk assessment were used in the development of the emergency operations plan.
- **Facilities Plan**—The results of the risk assessment and mapped hazard areas are used in facility planning for the District. Potential sites are reviewed for hazard risks, and appropriate mitigation measures are considered in building and site design.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, any plans that fall into the “Existing Integration” category should be reviewed and elements from them should be included in the action plan as appropriate.

Opportunities for Future Integration

List any plans or programs that offer the potential for future integration and describe the process by which integration will occur. Examples follow:

- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Post-Disaster Recovery Plan**—The District does not have a recovery plan and intends to develop one as a mitigation planning action during the next five years. The plan will build on the mitigation goals and objectives identified in the mitigation plan.

Consider other programs you may have in place in your jurisdiction that include routine consideration and management of hazard risk. Examples of such programs may include: tree pruning programs, right-of-way mowing programs, erosion control or stream maintenance programs, etc. Add any such programs to the integration discussion and provide a brief description of how these program manage (or could be adapted to manage) risk from hazards.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, an action to integrate any identified “Opportunities for Future Integration” should be considered for inclusion in the action plan.

PUBLIC OUTREACH

Note that this section is part of the Phase 3 annex, but documentation can begin in Phases 1 and 2 if applicable.

FEMA requirements for public outreach will be met by the County's engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of this hazard mitigation plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

Note that this section will ultimately describe all information sources used to develop this annex, but that only the sources used for Phases 1 and 2 will be listed at this point. Additional sources will be added with the preparation of the Phase 3 annex.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but be sure to update and enhance any descriptions. Providing this information is a requirement to pass the state and FEMA review process.

THIS COMPLETES PHASE 2

PHASE 3 INSTRUCTIONS

RISK ASSESSMENT

Jurisdiction-Specific Natural Hazard Event History

In the table titled “Past Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Refer to the table below that lists hazard events in the planning area as recognized by the county, the state, and the federal government.

Table 1. Presidential Disaster Declarations for the Planning Area

Incident Dates	FEMA Disaster # or Event Name	County Emergency Op. Center Activated	Gubernatorial Declaration	Presidential Declaration
1/20/2020 - continuing	DR-4534 COVID-19 Pandemic			✓
3/29 – 6/15/2017	DR-4342 Flooding			✓
2/9/2017 ^a	Record Snowfall		✓	✓
7/27 - 9/26/2000	DR-1341 Wildfires			✓
12/31/1964	DR-186 Heavy Rains & Flooding			✓
2/14/1963	DR-143 Flood			✓
2/14/1962	DR-120 Flood			✓
6/26/1961	DR-116 Flood			✓
7/22/1960	DR-105 Wildfires			✓
5/27/1957	DR-76 Flood			✓
4/21/1956	DR-55 Flood			✓

a. Declaration date

We recommend including most large-scale disasters, unless you know that there were no impacts on your jurisdiction. Specifically, we recommend that you include these events if you have damage estimate information or can provide a brief description of impacts that occurred within your community. In addition to these events, refer to the NOAA storm events database included in the toolkit. We recommend conducting a search for the name of your jurisdiction in order to identify events with known impacts. Other potential sources of damage information include the following

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Emergency management documents (general plan safety element, emergency response plan, etc.)
- Resident input.

If you do not have estimates for costs of damage caused, list “Not Available” in the “Damage Assessment” column or list a brief description of the damage rather than a dollar value (e.g., Main Street closed as a result of flooding, downed trees and residential damage). Note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

Hazard Risk Ranking

Risk ranking identifies which hazards pose the greatest risk to the community, based on how likely it is for each hazard to occur (this is called the community's exposure) and how great an impact each hazard will have if it does occur (this is called the community's vulnerability). Every jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area. Risk rankings for cities and the county have been calculated in the "Loss Matrix" spreadsheet included in the annex preparation toolkit. These rankings are on the basis of risk ranking scores for each hazard that were calculated based on the hazard's probability of occurrence and its potential impact on people, property and the economy.

The risk ranking methodology used for cities and counties is not usable for special-purpose districts because the risk-related mapping generally does not align with the boundaries of districts. To rank risk for your District, use the following procedure:

- Find the risk ranking scores in the Loss Matrix spreadsheet (on the "Risk Ranking Summary" tab) for the county overall and for any cities whose area overlaps that of your District.
- For each hazard, generate a risk ranking score for your District by calculating the average of the scores for those other jurisdictions.
- Rank the hazards based on those average scores:
 - Assign the rank of 1 to the hazard with the highest risk ranking score, the rank of 2 to the hazard with the second highest ranking score; and so on.
 - Assign the same rank to any two hazards with equal risk ranking scores
- If the resulting ranking differs from what you know based on substantiated data and documentation, alter the scores and ranking as needed based on this knowledge.
- Assign each hazard to the risk category of "High," "Medium," or "Low" based on the risk rating score:
 - Low for scores of 0 to 15
 - Medium for scores of 16 to 30
 - High for scores greater than 30

Enter the results of this analysis in the "Hazard Risk Ranking" table in the template; enter the hazards in order of ranking, with 1 at the top of the table.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, you will need to have at least one mitigation action for each hazard ranked as "high."

Jurisdiction-Specific Vulnerabilities

Review the results of the risk assessment included in the toolkit, your jurisdiction's natural events history, and any relevant public comments/input, then develop a few sentences that discuss specific hazard vulnerabilities. You do not need to develop a sentence for every hazard, but identify a few issues you would like to highlight. Also list any known hazard vulnerabilities in your jurisdiction that may not be apparent from the risk assessment and other information provided.

Spending some time thinking about the results of the risk assessment and other noted vulnerabilities will be a big help in the development of your hazard mitigation action plan. The following are examples of vulnerabilities you could identify through this exercise:

- Over the past 10 years, the jurisdiction has experienced more than \$1 million in damage to critical assets from severe storm events.
- 17 critical assets are in areas that would be permanently inundated with 12 inches of sea level rise.
- One significant District asset is not equipped with a generator and four District buildings are unreinforced masonry or soft-story construction.
- An area along the river is eroding and threatening a District-owned treatment facility.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, consider including actions to address the jurisdiction-specific vulnerabilities listed in this section.

HAZARD MITIGATION ACTION PLAN

Hazard Mitigation Action Plan Matrix

The hazard mitigation action plan is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan.

Select Recommended Actions

All of the work that you have done thus far should provide you with ideas for actions. Throughout these instructions, green boxes labeled “Hazard Mitigation Action Plan Input” have indicated information that needs to be considered in the selection of mitigation actions. The following sections describe how to consider these and other information sources to develop a list of potential actions.

Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify actions where benefits exceed costs.
- Include any action that your jurisdiction has committed to pursuing, regardless of grant eligibility.
- Know what is and is not grant-eligible under various federal grant programs (see the fact sheet on FEMA hazard mitigation grant programs in the toolkit and the table on the next page).

Material Previously Developed for This Annex

Capability Assessment Section—Planning and Regulatory Capability Table, Fiscal Capability Table, Administrative and Technical Capability Table, and Education and Outreach Table

Review these tables and consider the following:

- For any capability that you do not currently have, consider whether your jurisdiction should have this capability. If so, consider including an action to develop/acquire the capability.
- For any capability that you do currently have, consider whether this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- If any items listed in the Planning and Regulatory Capabilities table have not been updated in more than 10 years, consider an action to review and update the capability and, as appropriate, incorporate hazard mitigation principles or information obtained in the risk assessment.
- Consider including actions that are identified in other plans and programs (capital improvement plans, strategic plans, etc.) as actions in this plan.

Capability Assessment Section— Adaptive Capacity for Climate Change Table

Consider your responses to this section:

- For criteria that you listed as medium or low, think of ways you could improve this rating (see adaptive capacity portion of the mitigation best practices catalog).
- For criteria you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity.
- For criteria that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices and adaptive capacity catalog).

Table 2. Federal Hazard Mitigation Grant Program Eligibility by Action Type

Eligible Activities	HMGP (Hazard Mitigation Grant Program)	BRIC (Building Resilient Infrastructure and Communities)	FMA (Flood Mitigation Assistance)
Mitigation Projects			
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Generators	√	√	
Localized Flood Risk Reduction Projects	√	√	√
Non-Localized Flood Risk Reduction Projects	√	√	
Structural Retrofitting of Existing Buildings	√	√	√
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildfire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Advance Assistance	√		
5 Percent Initiative Projects*	√		
Aquifer and Storage Recovery**	√	√	√
Flood Diversion and Storage**	√	√	√

Eligible Activities	HMGP (Hazard Mitigation Grant Program)	BRIC (Building Resilient Infrastructure and Communities)	FMA (Flood Mitigation Assistance)
Floodplain and Stream Restoration**	√	√	√
Green Infrastructure**	√	√	√
Miscellaneous/Other**	√	√	√
Hazard Mitigation Planning	√	√	√
Technical Assistance			√
Management Costs	√	√	√

- * FEMA allows increasing the 5% initiative amount under the Hazard Mitigation Grant Program up to 10% for a presidential major disaster declaration. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.
- ** Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

Integration Review Section

Review the items you identified in this section and consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated.

Risk Ranking Section

You must identify at least one mitigation action that is clearly defined and actionable (i.e. not a preparedness or response action) for every hazard that is categorized in the risk ranking as “high” or “medium” risk.

Jurisdiction-Specific Vulnerabilities Section

Review the vulnerability issues that you identified in this section and consider actions to address them (see mitigation best practices catalog).

Status of Previous Plan Actions Section

If your jurisdiction participated in a previous hazard mitigation plan, be sure to include any actions that were identified as “carry over” actions.

Other Sources

Mitigation Best Practices Catalog

A catalog that includes best practices identified by FEMA and other agencies, as well as recommendations from the steering committee and other stakeholders, is included in your toolkit. Review the catalog and identify actions your jurisdiction should consider for its action plan.

Public Input

Review input received during the process, specifically the public survey results included in your toolkit.

Common Actions for All Partners

The following three actions have been prepopulated in your annex template; **these three actions should be included in every annex and should not be removed:**

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas, prioritizing those structures that have experienced repetitive losses and/or are located in high or medium ranked hazard.
- Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.
- Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

In addition, the core planning team recommends that every planning partner strongly consider the following actions:

- Identify and pursue strategies to increase adaptive capacity to climate change.
- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Develop a post-disaster recovery plan and a debris management plan.
- Develop and/or update plans that support or enhance continuity of operations following disasters.

The specifics of all these common actions should be adjusted as needed for the particulars of each community.

Complete the Table

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified and would like to include in the plan:

- Enter the action number (see box at right) and description. **If the action is carried over from your previous hazard mitigation plan, return to the “Status of Previous Plan Actions” table you completed in Phase 1 and enter the new action number in the column labeled “Action # in Update.”**
- Indicate whether the action mitigates hazards for new and/or existing assets.
- Identify the specific hazards the action will mitigate (note: you must list each hazard by name; simply indicating “all hazards” is not deemed acceptable).
- Identify by number the mitigation plan objectives that the action addresses (see toolkit).
- Indicate who will be the lead in administering the action. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department as responsible for the action, clearly identify one as the lead agency and list the others in the “supporting agency” column.
- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium,” or “Low,” as determined for the prioritization process described in the following section.
- Identify funding sources for the action. If it is a grant, include the grant-providing agency as well as funding sources for any required cost share. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table on page 14 of these instructions for project eligibility for FEMA’s hazard mitigation assistance grant programs.
- Indicate the time line as “short-term” (1 to 5 years) or “long-term” (5 years or greater) or “ongoing” (a continual program)

Action Numbering

Actions are to be numbered using the code for your jurisdiction shown below, followed by a hyphen and the action’s sequential number:

- Ada Couty Highway District—ACHD-1, ACHD-2...
- Eagle Fire Protection District—EFD-1, EFD-2...
- Eagle Sewer District—ESD-1, ESD-2...
- Eagle Urban Renewal Agency—EURA-1, EURA-2...
- Flood Control District #10—FCD10-1, FCD10-2...
- Greater Boise Auditorium District — GBAD-1, GBAD-2...
- Independent School District Of Boise #1—BSD-1, BSD-2...
- Joint School District #2—JSD2-1, JSD2-2...
- Kuna Rural Fire District—KFD-1, KFD-2...
- Kuna School District—KSD-1, KSD-2...
- Meridian Development Corporation—MDC-1, MDC-2...
- North Ada County Fire & Rescue— NACFR-1, NACFR-2...
- Star Joint Fire Protection District —SFD-1, SFD-2...
- Star Sewer and Water District—SSW-1, SSW-2...
- West Boise Sewer District— WBS -1, WBS -2...
- Whitney Fire Protection District— WFD -1, WFD -2

Mitigation Action Priority

Complete the information in the table titled “Mitigation Action Priority” as follows:

- **Action #**—Indicate the action number from the Hazard Mitigation Action Plan Matrix table.
- **# of Objectives Met**—Enter the total number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
 - High—Action will provide an immediate reduction of risk exposure for life and property.
 - Medium—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.

- Low—Long-term benefits of the action are difficult to quantify in the short term.
- **Cost**—Enter “High,” “Medium” or “Low” as follows:
 - High—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
 - Medium—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - Low—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
- **Is the Action Grant-Eligible?**—Enter “Yes” or “No.” Refer to the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table on page 14 of these instructions.
- **Can Action Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another source such as grants?
- **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
 - Medium Priority—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
 - Low Priority—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known grant funding. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for grant funding from programs that have not yet been identified.
- **Grant Pursuit Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets identified grant eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible for grant funding.
 - Medium Priority—An action that meets identified grant eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
 - Low Priority—An action that has not been identified as meeting any grant eligibility requirements.

Actions identified as high-grant-pursuit priority actions should be closely reviewed for consideration when grant funding opportunities arise.

Note: If a jurisdiction wishes to identify an action as high priority that is outside of the prioritization scheme for high priorities, a note indicating so should be inserted and a rationale should be provided.

Analysis of Mitigation Actions

In the table titled “Analysis of Mitigation Actions,” for each combination of hazard type and mitigation type, enter the numbers of all recommended actions that address that hazard type and can be categorized as that mitigation type. The mitigation types are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilience**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions. This table must show at least one action to address each “high” and “medium” ranked hazard. Planning partners should aim to identify at least one action for each mitigation type, but this is not required.

An example of a completed “Analysis of Mitigation Actions” table is provided below. Note that an action can be more than one mitigation type.

Sample Completed Table – Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11			EX-3, 4, 8, 9, 10
Drought	EX-2	EX-1	EX-4					EX-3, 4, 8, 9, 10
Medium-Risk Hazards								
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11	EX-6		EX-3, 4, 8, 9, 10
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9, 10
Low-Risk Hazards								
Severe Weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11		EX-8, 7	EX-3, 4, 8, 9, 10
Wildfire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11			EX-3, 4, 8, 9, 10

PUBLIC OUTREACH

FEMA requirements for public outreach will be met by the County’s engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of this hazard mitigation plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

This section should describe what resources you used to complete the annex and how you used them. The sources used for Phases 1 and 2 should have been entered previously. List any additional sources used for the preparation of the Phase 3 annex. Review to ensure that all materials used in all three phases are identified. Providing this information is a requirement to pass the state and FEMA review process.

FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. **This section is optional.**

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. **This section is optional.**

THIS COMPLETES PHASE 3

Special-Purpose District Annex Template

1. DISTRICT NAME

1.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

Alternate Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Hazard Mitigation Planning Team Members

Name	Title

1.2 JURISDICTION PROFILE

1.2.1 Overview

Insert Narrative Profile Information, per Instructions.

The [name of adopting body] assumes responsibility for the adoption of this plan; [name of oversight agency] will oversee its implementation.

All fire districts should include the following sentence (non-fire special purpose districts should delete the sentence):

The District participates/does not participate in the Public Protection Class Rating System and currently has a rating of #.

1.2.2 Service Area

The District service area covers [area in square miles], serving a population of [population].

1.2.3 Assets

Table 1-2 summarizes the assets of the District and their value.

Table 1-2. Special Purpose District Assets	
Asset	Value
Property	
[number] acres of land	\$ [value]
Equipment	
[description]	\$ [value]
[description]	\$ [value]
[description]	\$ [value]
[description]	\$ [value]
[description]	\$ [value]
Total:	\$ [value]
Critical Facilities	
[description – Include Address]	\$ [value]
[description – Include Address]	\$ [value]
[description – Include Address]	\$ [value]
[description – Include Address]	\$ [value]
Total:	\$ [value]

1.3 CURRENT TRENDS

Insert summary description of service trends.

1.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 1-3.
- An assessment of fiscal capabilities is presented in Table 1-4.
- An assessment of administrative and technical capabilities is presented in Table 1-5.
- An assessment of education and outreach capabilities is presented in Table 1-6.

- Classifications under various community mitigation programs are presented in Table 1-7.

Table 1-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		

Table 1-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes/No
Capital Improvements Project Funding	Yes/No
Authority to Levy Taxes for Specific Purposes	Yes/No
User Fees for Water, Sewer, Gas or Electric Service <i>If yes, specify: Enter Response</i>	Yes/No
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
Withhold Public Expenditures in Hazard-Prone Areas	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Other <i>If yes, specify: Enter Response</i>	Yes/No

Table 1-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Surveyors <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Emergency manager <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Grant writers <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Other <i>If Yes, Department /Position:</i> Enter Response	Yes/No

Table 1-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes/No
Do you have personnel skilled or trained in website development?	Yes/No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Enter Response	Yes/No

Table 1-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes/No		Date
DUNS#	Yes/No		Date
Community Rating System	Yes/No		Date
Building Code Effectiveness Grading Schedule	Yes/No		Date
Public Protection	Yes/No		Date
Storm Ready	Yes/No		Date
Firewise	Yes/No		Date
Tsunami Ready	Yes/No		Date

1.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

1.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

1.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

• **Plan or Program Name—Description**

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan presented in this annex.

1.6 RISK ASSESSMENT

1.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 1-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 1-8. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$

1.6.2 Hazard Risk Ranking

Table 1-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 1-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1			High/Medium/Low
2			High/Medium/Low
3			High/Medium/Low
4			High/Medium/Low
5			High/Medium/Low
6			High/Medium/Low
7			High/Medium/Low
8			High/Medium/Low
9			High/Medium/Low

1.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Insert as appropriate.
- Insert as appropriate.
- Insert as appropriate.

Mitigation actions addressing these issues were prioritized for consideration in the action plan presented in this annex.

1.7 STATUS OF PREVIOUS PLAN ACTIONS

If your jurisdiction has no previous hazard mitigation plan, please enter an “X” in the box at right and do not complete this section.

Table 1-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 1-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Insert Action Number & Text Comment: Enter Comment				
Insert Action Number & Text Comment: Enter Comment				
Insert Action Number & Text Comment: Enter Comment				
Insert Action Number & Text Comment: Enter Comment				

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	
Insert Action Number & Text <i>Comment: Enter Comment</i>	█	█	█	

1.8 HAZARD MITIGATION ACTION PLAN

Table 1-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 1-12 identifies the priority for each action. Table 1-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Enter Response						
Existing	Enter Response	Enter Response	Enter Response	High	HMGP, PDM, FMA	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> All hazards						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Short-term
Action xxx-3 — Purchase generators for critical facilities and infrastructure that lack adequate backup power, including [REDACTED].						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
Existing	Enter Response	Enter Response	Enter Response			
Action xxx-4 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-5 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-6 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-7 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-8 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 1-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	3	Low	Low	Yes	No	Yes	High	Low
3	3	High	Medium	Yes	Yes	No	Medium	High
4	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
6	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
7	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
8	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

a. See the introduction to this volume for explanation of priorities.

Table 1-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
High-Risk Hazards								
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Medium-Risk Hazards								
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Low-Risk Hazards								
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

a. See the introduction to this volume for explanation of mitigation types.

1.9 PUBLIC OUTREACH

Table 1-14 lists public outreach activities for this jurisdiction.

Table 1-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

1.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

- <INSERT DOCUMENT AND DESCRIPTION OF HOW IT WAS USED>

1.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

1.12 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section

