2021 Canyon County All-Hazard Mitigation Plan

Volume 2: Planning Partner Annexes

Internal Review Draft



TETRA TECH

February 2021

2021 Canyon County All-Hazard Mitigation Plan

Volume 2: Planning Partner Annexes

February 2021

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INTRODUCTION

BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

> "Multi-jurisdictional plans (e.g. watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan." (Section 201.6.a(4))

For the 2020 Canyon County Hazard Mitigation Plan, a planning partnership was formed to leverage resources and to meet requirements of the federal Disaster Mitigation Act (DMA) for eligible local governments in Canyon 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."

There are two types of planning partners that participated in this process, with distinct needs and capabilities:

- Incorporated municipalities (cities and the County)
- Special purpose districts.

Each participating planning partner has prepared a jurisdiction-specific annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

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. Two kickoff meeting were held—on June 5, 2019 and August 22, 2019—to confirm potential stakeholders and planning partners for this process. The purpose of the meeting was to introduce the plan update process to jurisdictions in the County that could have a stake in the outcome of the planning effort. 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 Canyon 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 (see Appendix A) and designated a point of contact for their jurisdiction. In all, formal commitment was received from five planning partners by the planning team, and the Canyon County planning partnership was formed. The letters of intent to participate are on file with Canyon County and are available for review upon request.

Groups Involved in The Planning Process

One of the goals of the multi-jurisdictional approach to natural hazard mitigation planning is to efficiently achieve compliance with the Disaster Mitigation Act (DMA) for all participating members in the planning effort. Several groups were involved in this process at different levels:

- **Planning Team—**The Tetra Tech team and Canyon County staff responsible for the facilitation of the planning process and the development of the plan document.
- **Steering Committee—**Representative members from the planning partnership and stakeholders that serve as the oversight body. They are responsible for many of the planning milestones and decisions prescribed for this process to help reduce the burden of time required by each planning partner.
- **Planning Partners—**Jurisdictions or special purpose districts that are developing an annex to the regional plan.
- **Planning Stakeholders—**The individuals, groups, businesses, academia, etc., from which the planning team gains information to support the various elements of the plan. This group may also be referred to as coordinating stakeholders.

Planning Partner Expectations

The planning team developed the following list of planning partner expectations, which were confirmed at the final kickoff meeting on August 22, 2019:

- Each partner will provide a "Letter of Intent to Participate."
- Each partner will 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.
- Each partner will 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.

- Each partner will 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.
- Each partner will be expected to 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.
- Each partner will be expected to review the risk assessment and identify hazards and vulnerabilities specific to its jurisdiction. Contract resources will provide jurisdiction-specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.
- Each partner will be expected to review the mitigation recommendations chosen for the overall county and determine if they will meet the needs of its 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.
- Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.
- Each partner will be required to complete its normal pre-adoption process prior to submitting the plan to its 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.
- Each partner will be required to formally adopt the plan.

By adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Volume 1. Failure to meet these criteria may 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. Separate templates were created for the two types of jurisdictions participating in this plan. The templates were created so that all criteria of Section 201.6 of 44 CFR for local governments would be met based on the partners' capabilities and mode of operation. Templates were deployed in three phases as summarized in Table 1. The templates were set up to lead all partners through steps to generate DMA-required elements specific to their jurisdictions. The templates and their instructions are included in Appendix C of this volume.

Table 1. Annex Preparation Phases

	Contents	Deployed	Due
Phase 1	Jurisdictional profile	December 13, 2019	January 31, 2020
Phase 2	Capability assessment	February 18, 2020	April 3, 2020
Phase 3	Risk ranking and action plan development	June 23, 2020	July 31,2020

Workshop

Under Phase 3 of the jurisdictional annex process, all partners were required to participate in a technical assistance workshop, where key elements of the template were discussed and the templates were subsequently completed by a designated point of contact for each partner and a member of the planning team. The Phase 3 workshop was held on June 23, 2020, and was attended by attended by representation from 8 of the 15 planning partners. The workshop addressed the following topics:

- The templates and the tool kit
- Natural events history
- Jurisdiction-specific issues
- Risk ranking
- Status of prior actions
- Developing your action plan
- Cost/benefit review
- Prioritization protocol
- Next steps.

Tool Kit

During the Phase 3 workshop, each planning partner was provided with a tool kit to assist in completing the annex template and developing an action plan. The tool kits contained the following:

- The 2013 Canyon County Hazard Mitigation Plan Annexes
- A catalog of mitigation best practices and adaptive capacity
- A list of jurisdiction-specific issues noted during the risk assessment
- Information on the FEMA Hazard Mitigation Assistance grant program
- Information on past hazard events that have impacted the planning area
- Funding assistance catalog
- FEMA fact sheets
- County-wide and jurisdiction-specific maps for hazards of concern
- Special district boundary maps showing the sphere of influence for each special purpose district partner
- The risk assessment results developed for this plan
- Information on climate change and expected impacts in the planning area

- Jurisdiction-specific annex templates, with instructions for completing them
- The completed Phase 1 and Phase 2 jurisdictional annexes
- FEMA guidance on plan integration
- The results of a public survey conducted as part of the public involvement strategy
- A copy of the presentation that was given at the workshop sessions.

MITIGATION ACTION PLAN DEVELOPMENT

Risk Ranking

In the risk-ranking exercise, each planning partner was asked to review the ranked risk specifically for its jurisdiction, based on the impact on its population and/or facilities. Municipalities based this ranking on probability of occurrence and the potential impact on people, property, and the economy. Special purpose districts based 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. The objectives of this exercise were to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as "high" and "medium" for each jurisdiction as a result of this exercise were considered to be priorities for identifying mitigation actions, although jurisdictions also identified actions to mitigate "low" ranked hazards, as appropriate.

Information Reviewed to Develop Action Plan

The tool kits were used during the workshops and in follow-up work conducted by the planning partners. A large portion of the workshop focused on how the tool kit should be used to develop the mitigation action plan. Planning partners were asked to review the following to assist in the identification of actions:

- The Jurisdiction's Capability Assessment—Reviewed to identify capabilities that the jurisdiction does not currently have but should consider pursuing or capabilities that should be revisited and updated to include best available information; also reviewed to determine how existing capabilities can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- The Jurisdiction's National Flood Insurance Program Compliance Table—Reviewed to identify opportunities to increase floodplain management capabilities.
- The Jurisdiction's Review of Its Adaptive Capacity for Climate Change—Reviewed to identify ways to leverage or continue to improve existing capacities and to improve understanding of other capacities.
- The Jurisdiction's Identified Opportunities for Future Integration—Reviewed to identify specific integration actions to be included in the mitigation strategy.
- Jurisdiction-Specific Vulnerabilities—Reviewed to identify actions that will help reduce known vulnerabilities.
- The Mitigation Best Practices Catalog—Reviewed to identify actions that the jurisdiction should consider including in its action plan.
- Public Input—Reviewed to identify potential actions and community priorities.

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 according to the following criteria:

- **High Priority**—An action that meets multiple objectives, has benefits that exceed cost, has funding secured or is an ongoing action and meets eligibility requirements for a grant program. High priority actions can be completed in the short term (1 to 5 years). The key factors for high priority actions are that they have funding secured and can be completed in the short term.
- **Medium Priority**—An action that meets multiple objectives, that has benefits that exceed costs, and for which funding has not yet been secured, but is eligible for funding. Action can be completed in the short term once funding is secured. Medium priority actions will become high priority actions once funding is secured. The key factors for medium priority actions are that they are eligible for funding, but do not yet have funding secured, and they can be completed within the short term.
- **Low Priority**—An action that will mitigate the risk of a hazard, that has benefits that do not exceed the costs or are difficult to quantify, for which funding has not been secured, that is not eligible for grant funding, and for which the time line for completion is long term (1 to 10 years). Low priority actions may be eligible for grant funding from other programs that have not yet been identified. Low priority actions are generally "blue-sky" or "wish-list." actions. Financing is unknown, and they can be completed over a long term.

Grant pursuit priorities were established using the following considerations:

- **High Priority**—An action that has been identified as meeting grant eligibility requirements, assessed to have high benefits, is listed as high or medium priority, and where local funding options are unavailable or where dedicated funds could be utilized for actions that are not eligible for grant funding.
- **Medium Priority**—An action that has been identified as meeting grant eligibility requirements, assessed to have medium or low benefits, is listed as medium or low priority, and where local funding options are unavailable.
- **Low Priority**—An action that has not been identified as meeting grant eligibility requirements or that has low benefits.

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**—Requires an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed action.
- **Medium**—Could budget for under existing work-plan but would require a reapportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
- **Low**—Possible to fund under existing budget. Action is or can be part of an existing ongoing 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 the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation (PDM) Program, both of which require detailed benefit/cost analyses. These analyses will be performed on actions at the time of application using the FEMA benefit-cost model. 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

All planning partners reviewed their recommended actions to classify each action 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 citizens 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, and wetland restoration and preservation.
- 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.
- 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.

These categories include categories identified in the Community Rating System (CRS) 2017 *CRS Coordinators Manual* (OMB No. 1660-0022). The CRS categories expand on the four categories in FEMA's 2013 *Local Mitigation Handbook*. They provide a more comprehensive range of options, thus increasing integration opportunities.

COMPATIBILITY WITH PREVIOUS APPROVED PLANS

The jurisdictions listed in Table 2 participated in the 2013 Canyon County mitigation planning effort. The table lists the dates that each of these jurisdictions adopted the previous hazard mitigation plan.

Table 2. Jurisdictions that Participated in Previous Hazard Plan

Jurisdiction	Previous Annex Adoption Date
Canyon County	10/8/2013
City of Caldwell	3/18/2013
City of Greenleaf	8/6/2013
City of Melba	5/13/2013
City of Middleton	7/3/2013
City of Nampa	4/1/2013
City of Notus	6/26/2013
City of Parma	5/29/2013
City of Wilder	4/9/2013
Nampa Highway District #1	5/31/2012
Canyon County Highway District #4	4/10/2013

Canyon County used the plan update process to comprehensively revise the original hazard mitigation plan. The updated plan differs from the initial plan for a variety of reasons:

- Better guidance now exists on what is required to meet the intent of the DMA.
- The scope of the plan has been expanded by including special-purpose district planning partners not involved in the initial planning effort. These district planning partners are true stakeholders in mitigation within the planning area.
- Newly available data and tools provide for a more detailed and accurate risk assessment. The initial plan did not use tools such as FEMA's Hazards U.S. Multi-Hazard (Hazus-MH) computer model or new geographic information system (GIS) data available from the County.
- The risk assessment has been prepared to better support future grant applications by providing risk and vulnerability information that will directly support the measurement of "cost-effectiveness" required under FEMA mitigation grant programs.
- Science and technology have improved since the development of the initial plan.
- There was a strong desire on the part of Canyon County for this plan to be a user-friendly document that is understandable to the general public and not overly technical.
- The plan identifies actions rather than strategies. Strategies provide direction, but actions are fundable under grant programs. This plan replaces strategies with a guiding principal, goals, and objectives. The identified actions meet multiple objectives that are measurable, so that all planning partners can measure the effectiveness of their mitigation actions.

FINAL COVERAGE UNDER THE PLAN

Table 3 lists the jurisdictions that submitted letters of intent and their ultimate status in this plan update. Six of the 15 planning partners that committed to this process fully met the participation requirements specified by the

Steering Committee. The nine planning partners that did not fully meet their planning partner requirements can still do so as long as they can complete those requirements within 1-year of the final approval date for this plan update. Otherwise, these jurisdictions will need to initiate a new planning process on their own to achieve compliance under Section 201.6, 44 CFR.

Table 3. Planning Partner Status

	Letter of Intent Date	Completed Phase 1	Completed Phase 2	Attended Phase 3 Workshop	Completed Phase 3	Covered by This Plan
Canyon County	N/A	Yes	Yes	Yes	Yes	**Yes**
City of Caldwell	8/26/2019	Yes	Yes	Yes	Yes	**Yes**
City of Greenleaf	10/29/2019	Yes	Yes	No	No	No
City of Melba	1/13/2020	No	No	No	No	No
City of Middleton	2/12/2020	No	No	Yes	No	No
City of Nampa	9/23/2019	Yes	Yes	Yes	Yes	**Yes**
City of Notus	1/22/2020	No	No	No	No	No
City of Parma	11/30/2020	No	No	No	No	No
City of Wilder	1/27/2020	No	No	No	No	No
Flood Control District #11	2/18/2020	Yes	Yes	Yes	Yes	**Yes**
Middleton Rural Fire District	12/12/2019	No	No	No	No	No
Canyon County Ambulance District	9/23/2019	No	No	Yes	No	No
Nampa School District #131	2/10/2020	Yes	Yes	Yes	Yes	**Yes**
Golden Gate Highway District	11/18/2019	Yes	Yes	Yes	Yes	**Yes**
Wilder Rural Fire Protection District	1/15/2020	No	No	No	No	No

POST-APPROVAL LINKAGE

As seen in Table 3, there was a high rate of attrition in this planning process, influenced by the regional response to the COVID-19 global pandemic. Nine of the 15 planning partners (60 percent) were not able to complete the planning partner expectations (see Appendix A) that they committed to at the beginning of the planning process. These nine planning partners are not part of the initial submittal package to the Idaho Office of Emergency Management and FEMA Region IX. However, they can still gain coverage under this plan if they complete the following within 1-calendar year of the plan's final approval date by FEMA Region X:

- Notify Canyon County Emergency Management that they intend to link to the plan.
- Complete all three phases of the jurisdictional annex process as prescribed during the plan update process (see the Phase 3 toolkit provided to all planning partners).
- Submit the completed jurisdictional annex to Canyon County Emergency Management for review and approval.
- Run a minimum two-week public comment period where the annex will be publicly accessible and allow the public to review and comment on the draft annex.
- Include an overview of the public process in the draft annex.
- Submit the draft annex to the Idaho Office of Emergency Management for review and approval.
- Adopt the plan following the adoption format used by the other Canyon County planning partners that was provided in the Phase 3 toolkit.

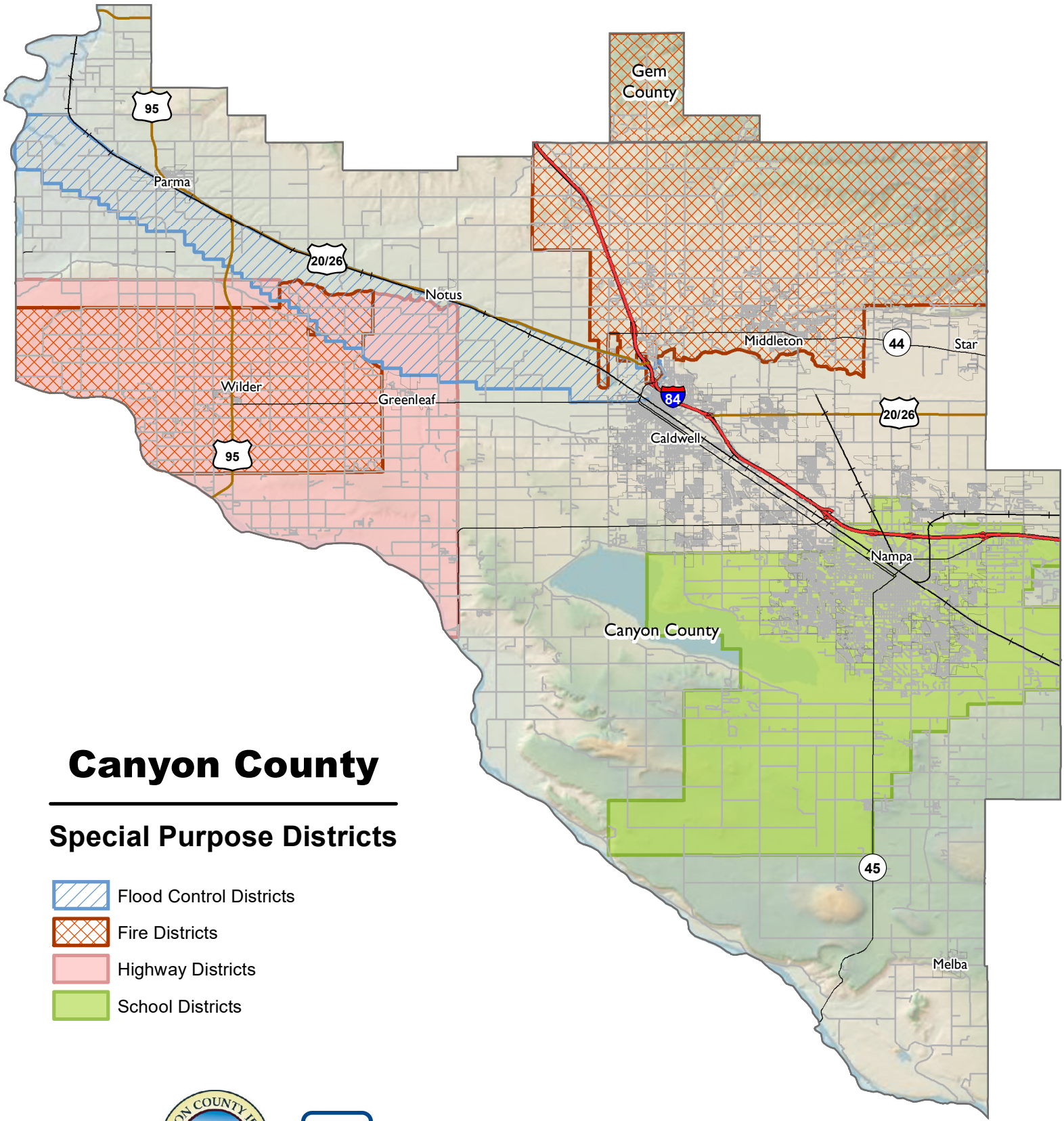
MAPS

Maps showing the hazard areas in Canyon County are provided in Volume 1 of this hazard mitigation plan. Hazard-area maps for other municipal planning partners are provided at the end of each partner's annex in this volume. A map showing the location of participating special purpose districts by district type is provided at the end of this introduction.

ACRONYMS AND ABBREVIATIONS

The following terms are used in the planning partner annexes:

- BRIC—Building Resilient Infrastructure and Communities
- C&CB grant—Capability and Capacity-Building grant
- CCEM—Canyon County Emergency Management
- CFR—Code of Federal Regulations
- DEQ—Department of Environmental Quality
- DSD—Department of Development Services
- EMPG—Emergency Management Performance Grant
- FEMA—Federal Emergency Management Agency
- FMA—USDA Flood Mitigation Assistance
- HMA—Hazard Mitigation Assistance
- HMGP—Hazard Mitigation Grant Program
- HSGP—Homeland Security Grant Program
- IPDES—Idaho Pollutant Discharge Elimination System
- LEPC—Local emergency planning committee
- MS4— Municipal Separate Storm Sewer System
- NFIP—National Flood Insurance Program
- NPDES—National Pollutant Discharge Elimination System
- OEM—Office of Emergency Management
- PDM—Pre-Disaster Mitigation grant program
- USGS—U.S. Geological Survey
- WWTP—Wastewater Treatment Plant
- IDAPA—Idaho Administrative Procedures Act
- SFHA—Special flood hazard area



Canyon County

Special Purpose Districts

- Flood Control Districts
- Fire Districts
- Highway Districts
- School Districts

Data Sources: Boundaries: Canyon County GIS, 2020;
Districts: ID State Tax Commission, 2020; Basemap: ESRI, 2020

0 5 10 Miles

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1. CANYON COUNTY

1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
Christine Wendelsdorf, Emergency Manager
1115 Albany
Caldwell, ID 83605
Telephone: 208-454-7271
e-mail Address: cwendelsdorf@canyonco.org

Alternate Point of Contact
Patricia Nilsson, Development Services Director
111 North 11th Avenue, #140
Caldwell, ID 83605
Telephone: 208-454-7458
e-mail Address: pnilsson@canyonco.org

This annex was drafted over the course of many months, with input from the County Emergency Manager, staff from the Development Services Department, Public Works, and the County Public Information Office. They utilized resources such as the 2013 Canyon County Hazard Mitigation Plan, COMPASS Idaho demographics reports, FEMA flood maps, U.S. Census Data, and the Canyon County 2020 Comprehensive Plan produced by the Development Services Department. Development of this annex was carried out by the members of the local mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Mitigation Planning Team Members

Name	Title
Christine Wendelsdorf	Emergency Manager
Patricia Nilsson	Director, Canyon County Development Services
Joe Decker	Public Information Officer

1.2 JURISDICTION PROFILE

1.2.1 Location

Canyon County is in southwest Idaho within the Boise Metropolitan Statistical Area. The current boundaries generally extend from Snake River, which forms the southern and western boundary of the county, north to the Payette and Gem county lines, encompassing an area of 604 square miles.

1.2.2 History

Canyon County was created from Ada County in an act approved by the Idaho Legislature on Marcy 7, 1891, effective at the November 26, 1892 election. Caldwell was designated as the county seat.

1.2.3 Climate

The climate of Canyon County is a semiarid to arid continental climate. Elevation ranges from about 2,200 feet near where the Boise River flows into the Snake River to 3,083 feet at Pickles Butte. Annual precipitation is dominantly 8 to 11 inches. It is slightly higher in the northeastern part of the county, and it as low as 6 inches in the southwestern part. The average annual temperature is 50 ºF to 52 ºF, and the frost-free season ranges from 140 to 165 days.

1.2.4 Governing Body Format

Canyon County is governed by a 3-member elected commission. The Board of Canyon County Commissioners assumes responsibility for the adoption of this plan; The Sheriff's Emergency Manager will oversee its implementation.

1.3 CURRENT TRENDS

1.3.1 Population

According to the Community Planning Association of SW Idaho (COMPASS), the population of Canyon County as of April 2020 was 234,820. Since 2010, the population has grown at an average annual rate of 2.43 percent.

1.3.2 Development

Development within Canyon County is focused within its nine cities. Since 2000, over 90 percent of new growth in Canyon County occurred within the incorporated cities, either through infill or annexation. 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.

1.4 CAPABILITY ASSESSMENT

Canyon County performed an assessment of its 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. This section summarizes the following findings of the assessment:

- An assessment of legal 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 1-2. Recent and Expected Future Development Trends

Criterion	Response					
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan?	No					
• **If yes, give the estimated area annexed and estimated number of parcels or structures.**	N/A					
Is your jurisdiction expected to annex any areas during the performance period of this plan?	No					
• **If yes, describe land areas and dominant uses.**	N/A					
• **If yes, who currently has permitting authority over these areas?**	N/A					
Are any areas targeted for development or major redevelopment in the next five years?	No					
• **If yes, briefly describe, including whether any of the areas are in known hazard risk areas**	N/A					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?		**2015**	**2016**	**2017**	**2018**	**2019**
	Single Family	223	249	340	338	362
	Multi-Family	0	0	0	0	0
	Other (commercial, mixed use, etc.)	522	490	610	677	751
	Total	745	739	950	1,015	1,113
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	• Special Flood Hazard Areas: **248 New Construction Permits from 2015 thru 2019** • Landslide: 0 • High Liquefaction Areas: 0 • Tsunami Inundation Area: 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.	COMPASS estimates at buildout Canyon County will have 1,274,106 people, 989,067 households, and 585,753 jobs.					

Table 1-3. Legal and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	Yes	No	Yes
Comment: *CCC, Chapter 6, Article 1, section 11 adopts 2015 IBC and 2012 IRC, Ord. 15-004, 3-13-2015*				
Zoning Code	Yes	No	No	Yes
Comment: *CCC, Chapter 7, Article 1, sections 1-25, Ord. 10-006, 8-16-2010*				
Subdivisions	Yes	No	Yes	Yes
Comment: *CCC, Chapter 7, Article 17, section 01-37, Ord. 11-003, 3-16-2011*				
Stormwater Management	No	Yes	No	Yes
Comment: *Stormwater conveyance is managed by the Highway Districts as part of street and road improvement*				
Post-Disaster Recovery	No	No	No	Yes
Comment: *Since this is a current lack of regulatory capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Real Estate Disclosure	No	No	No	No
Comment: *Since this is a current lack of regulatory capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Growth Management	Yes	No	No	Yes
Comment: *2020 Canyon County Comprehensive Plan in combination with the Zoning Ordinance (listed above) are the primary tools for managing growth in the unincorporated areas of the County*				
Site Plan Review	No	No	No	Yes
Comment: *Since this is a current lack of regulatory capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Environmental Protection	No	No	No	Yes
Comment:				
Flood Damage Prevention	Yes	Yes	No	Yes
Comment: *CCC, Chapter 7, Article 10A, sections 1-17, Rep. by Ord. 05-002, 1-19-2005*				
Emergency Management	Yes	Yes	Yes	Yes
Comment:				
Climate Change	No	No	No	Yes
Comment: *Since this is a current lack of regulatory capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Planning Documents				
Comprehensive plan	Yes	Yes	Yes	Yes
Is the plan compliant with the Idaho Local Land Use Planning Act? Yes				
Comment: *2020 Canyon County Comprehensive Plan (https://www.canyonco.org/elected-officials/commissioners/development-services/growingtogether/)*				
Capital Improvement Plan	Yes	No	No	Yes
How often is the plan updated? *Annually*				
Comment:				
Disaster Debris Management Plan	No	No	No	Yes
Comment: *Since this is a current lack of regulatory capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Floodplain or Watershed Plan	No	No	No	Yes
Comment: *Since this is a current lack of regulatory capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Stormwater Plan	No	No	No	Yes
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Urban Water Management Plan	No	No	No	No
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Habitat Conservation Plan	No	Yes	No	Yes
Comment:				
Economic Development Plan	No	Yes	No	Yes
Comment:				
Shoreline Management Plan	N/A	N/A	N/A	N/A
Comment:				
Community Wildfire Protection Plan	No	No	No	Yes
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Forest Management Plan	N/A	N/A	N/A	N/A
Comment:				
Climate Action Plan	No	No	No	Yes
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Comprehensive Emergency Management Plan	Yes	No	No	Yes
Comment: *Canyon County Emergency Operations Plan (April 2019)*				
Threat & Hazard Identification & Risk Assessment	No	No	No	Yes
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Post-Disaster Recovery Plan	No	No	No	Yes
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Continuity of Operations Plan	No	No	No	Yes
Comment: *Since this is a current lack of planning capability for the County, it could be considered as an action for this plan if determined to be feasible by the County*				
Public Health Plan	No	Yes	No	Yes
Comment: *Southwest District Health has an infectious disease plan, and a point of distribution plan*				

Table 1-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? • **If no, who does? If yes, which department?**	Yes N/A
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	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	Yes
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 1-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	The Canyon County Development Services department has 5 FTE planners and a contract engineer.
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Canyon County Development Services department has a building official and 3 FTE structural inspectors and a contract engineer.
Planners or engineers with an understanding of natural hazards	Yes	Planners and inspectors have had training in natural hazards. One plan reviewer and one planner have CFM certification.
Staff with training in benefit/cost analysis	No	
Surveyors	Yes	The county has a contract surveyor.
Personnel skilled or trained in GIS applications	Yes	The Development Services Department has 1 FTE GIS Analyst. The IT Department has 1 FTE GIS Manager. The Assessor's office have 4 FTE who manage the County land records system.
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	The Sheriff's office as 1 FTE Emergency Manager.
Grant writers	Yes	Canyon County has access to grant writers through its membership in COMPASS and Western Alliance for Economic Development.

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? • **If yes, briefly describe.**	Yes The current All Hazard Mitigation Plan and Comprehensive Plan are posted on the County website.
Do you use social media for hazard mitigation education and outreach? • **If yes, briefly describe.**	Yes The County maintains Facebook, Twitter and Nextdoor accounts.
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • **If yes, briefly describe.**	Yes The County Planning and Zoning Commissions reviews new development proposals and evaluates the need and sufficiency of hazard mitigation.
Do you have any other programs already in place that could be used to communicate hazard-related information? • **If yes, briefly describe.**	No
Do you have any established warning systems for hazard events? • **If yes, briefly describe.**	Yes Reverse 911/ Alertsense warning system

Table 1-8. 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 / Assist. Plans Examiner
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	June 7, 2019
Does your floodplain management program meet or exceed minimum requirements? • **If exceeds, in what ways?**	Meets
When was the most recent Community Assistance Visit or Community Assistance Contact?	2013 to Current
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • **If so, state what they are.**	Yes Existing structures out of compliance
Are any RiskMAP projects currently underway in your jurisdiction? • **If so, state what they are.**	Yes New Construction or Development
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • **If no, state why.**	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? • **If so, what type of assistance/training is needed?**	No

Criterion	Response
Does your jurisdiction participate in the Community Rating System (CRS)? • **If yes, is your jurisdiction interested in improving its CRS Classification?** • **If no, is your jurisdiction interested in joining the CRS program?**	No Yes/No No
How many flood insurance policies are in force in your jurisdiction?[a] • **What is the insurance in force?** • **What is the premium in force?**	199 $47,642,600 $137,836.00
How many total loss claims have been filed in your jurisdiction?[a] • **How many claims are still open or were closed without payment?** • **What were the total payments for losses?**	0 0 $0.00

a. According to FEMA statistics as of September 11, 2019

Table 1-9. Community Classifications

	Participating?	Classification	Date Classified
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

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.

1.5 INTEGRATION WITH OTHER PLANNING INITIATIVES

The goal of plan integration is to ensure that the potential impact of hazards is considered in planning for future development. 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).

Review of the plans, programs and ordinances identified in the capability assessment tables identifies plans and programs that have already been integrated with the goals and recommendations of the hazard mitigation plan, and those that offer opportunities for future integration.

1.5.1 Existing Integration

The following plans or ordinances already address potential impacts or include specific projects that should be included as action items in the mitigation action plan:

- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Building Code Code**—The County has adopted the 2015 International Residential Code and the 2015 International Building Code.
- **Zoning Code**—Canyon Code integrates hazard avoidance and mitigation requirements in its hillside and floodplain standards and review processes.

1.5.2 Opportunities for Future Integration

The following plans or ordinances present opportunities for future integration of action items in the mitigation action plan:

- **Post-Disaster Recovery Plan**—Canyon County 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.
- **Canyon County 2020 Comprehensive Plan—**Future updates to the County Comprehensive plan should look to the Hazard Mitigation Plan to inform land use decisions based on the potential impacts from the hazards of concern addressed by the plan. These updates should consider a buildable lands analysis that looks at the interface of lands available for development and the extent and location of hazards assessed by this plan
- **2019 Canyon County Emergency Operations Plan—**Future updates to the Emergency Operations Plan should strive for consistency with the hazard mitigation plan in the hazards it addresses and how critical facilities/infrastructure are defined.

1.6 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 1-10 lists past occurrences of natural hazards that affected unincorporated Canyon County. Other hazard events that broadly affected the entire planning area, including Canyon County, 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 # (if applicable)	Date	Damage Assessment
Idaho Covid-19 Pandemic (DR-4534)	DR-4534	1/20/2020	N/A
Idaho Flooding (DR-4342)	DR-4342	3/29/2017	N/A
Idaho Drought (EM-3040)	EM-3040	05/7/1977	N/A
Idaho FLOODS (DR-143)	DR-143	2/14/1963	N/A
Idaho FLOODS (DR-120)	DR-120	2/14/1962	N/A
Idaho FLOODS (DR-116)	DR-116	6/26/1961	N/A
Idaho FLOOD (DR-76)	DR-76	5/27/1957	N/A
Idaho FLOODS (DR-55)	DR-55	4/22/1956	N/A

1.7 HAZARD RISK RANKING

Table 1-11 presents a local ranking for Canyon County of all hazards of concern for which Volume 1 of 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 of each hazard, along with its potential impacts on people, property, and the economy. Mitigation action development targets hazards with high and medium ratings.

Table 1-11. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Severe Weather *e*	3 x (9+6+2) = 51	High
2	Flood *c*	3 x (3+2+1)= 18	Medium
2	Wildfire *a*	3 x (3+2+1) = 18	Medium
3	Earthquake *b*	1 x (9+6+1) = 16	Medium
4	Landslide *f*	2 x (3+2+1) = 12	Low
5	Dam Failure *d*	1 x (6+2+1) = 9	Low
6	Drought *g*	3 x (0+0+2) =6	Low

a. Based on High and Moderate-High Fire Severity Zones
b. Based on the Squaw Creek M7.0 scenario
c. Based on 100 year or 1 percent annual chance hazard results used for risk ranking
d. Based on the aggregation of all dam failure scenarios
e. Severe weather is assessed more qualitatively than other hazards. Assumptions for risk ranking include high probability, medium impact on people, low impact on property and low impact on economy.
f. Slope greater than 30% and slope 15% to 30% areas were utilized for risk ranking
g. Drought is assessed more qualitatively than other hazards. Generally, drought does not cause injury or death to people or result in property damage. Assumptions for risk ranking include high probability, no impact on people, low impact on property and medium impact on economy.

1.8 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 the jurisdiction.

1.8.1 Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified repetitive-loss properties: None
- Number of FEMA-identified severe-repetitive-loss properties: None
- Number of repetitive-loss properties or severe-repetitive-loss properties that have been mitigated: None

1.8.2 Other Noted Vulnerabilities

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

- Wildfire in northeast area of Canyon County.

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

1.9 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	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Enter Action #
Canyon County will develop a "storm water" master plan that addresses the management of the Drainage Districts			X	6
Comment:				
Inspect county owned buildings, particularly un-reinforced masonry, for hazard stability			X	7
Comment:				
Publish a special section in your local newspaper with emergency information on earthquakes.			X	8
Comment:				
Develop a County-wide policy that directs the floodplain administrator to document all landslides, bank failures, "washouts", and manmade embankment failures.			X	9
Comment: *The County adopt a policy to waive fees for development permits required for repairs due to bank failures.*				
Develop a Land Use Policy that promotes removing or converting existing development or discouraging or regulating new development in unstable areas.	X			
Comment: *This policy was adopted in Chapter 7 of the County Comprehensive Plan (see Policies 2 and 3).*				
Develop a Land Use Policy that restricts construction in areas of known landslides, debris flows, steep slopes, streams and rivers, intermittent-stream channels, and the mouths of mountain channels.	X			
Comment: *This policy was adopted in Chapter 7 of the County Comprehensive Plan (see Policies 2 and 3).*				
Develop a policy that requires a Burned Area Recovery Plan in the County			X	10
Comment:				
Installing Barn Owl houses on private property near areas of pocket gopher infestations	X			
Comment: *This action has been identified as "completed" because it is now an ongoing capability.*				
Identification of Emergency Shelters and Alternate Dispatch sites.			X	11
Comment:				

1.10 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 1-13 lists the actions that make up the Canyon County hazard mitigation action plan. 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

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
CC-1—Where appropriate, support retrofitting, 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.							
Existing	Dam Failure, Earthquake, flooding, landslide, wildland fire	3, 4, 10	Development Services (DSD)	Emergency Management (CCEM)	High	HMGP, PDM, FMA	Short-term
CC-2— Integrate the hazard mitigation plan into the comprehensive plan and zoning ordinance.							
New and Existing	Dam failure, earthquake, flooding, landslide, wildland fire	1, 3, 4, 5, 7, 8, 10	DSD	CCEM	Low	Staff Time, General Funds	Ongoing
CC-3— Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	1, 5, 8	CCEM	Al Planning Partners	Low	Staff Time, General Funds	Short-term
CC-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: • Enforce the flood damage prevention ordinance. • Participate in floodplain identification and mapping updates. • Provide public assistance/information on floodplain requirements and impacts.							
New and Existing	Dam failure, flooding, severe weather,	1, 3, 5, 7, 8, 10	DSD	OEM	Low	Staff Time, General Funds	Ongoing
CC-5— Acquire generators for critical facilities and infrastructure that lack adequate back-up power including.							
Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	9, 10, 12	OEM	Critical Facility Owner/Operators	High	FEMA HMA Grants, Local Funds	Short-Term
CC-6— Develop a "storm water" master plan that addresses the management of the Drainage Districts							
New and Existing	Dam Failure, Flood and Severe Weather	2, 6, 9, 11, 12	DSD	Drainage Districts	High	FEMA BRIC, FMA grants, Local Funds	Long Term
CC-7— Inspect county owned buildings, particularly un-reinforced masonry, for seismic stability							
Existing	Earthquake	3, 9, 10, 12	DSD	CCEM	High	FEMA BRIC C&CB grant, Local Funds	Long Term
CC-8— Annually publish a special section in the local newspaper with emergency information on earthquakes.							
New and Existing	Earthquake	6, 8	CCEM		Low	Local Funds	Short term
CC-9— Develop a County-wide policy that directs the floodplain administrator to document all landslides, bank failures, "washouts", and manmade embankment failures.							
New and Existing	Flood, Landslide	2, 6, 9, 11, 12	DSD	CCEM	Medium	Local Funds	Short Term
CC-10— Develop a policy that requires a Burned Area Recovery Plan in the County							
New and Existing	Wildfire	2, 6, 9, 11, 12	DSD	CCEM	Medium	Local Funds	Short Term

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
CC-11— Identify locations for Emergency Shelters and Alternate Dispatch sites.							
Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	5, 7, 9	CCEM	N/A	Low	Local Funds	Ongoing
CC-12— Work with the Idaho Survey and Rating Bureau to establish a Building Code Effectiveness Grading classification for the county.							
New	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	1, 2, 4, 9	DSD	CCEM	Low	Local Fuds	Short term
CC-13—Identify and assess all dams and canals in Canyon County and implement a study to determine the impacts of a breach. This study should look at impacts of differing scenarios associated with the design, construction, and maintenance of the facility.							
New and Existing	Dam Failure, Flood	2, 6, 9, 11, 12	DSD	Irrigation Districts	High	FEMA HMA Grants, Local Funds	Long Term
CC-14—Develop a continuity of operations plan and a post-disaster recovery framework for the County.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	5, 7, 9	CCEM	N/A	High	EMPG, HSGP, Local Funds	Long term

Table 1-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	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	Medium
2	7	High	Low	Yes	No	Yes	High	N/A
3	3	Low	Low	Yes	No	Yes	High	N/A
4	7	Medium	Low	Yes	No	Yes	High	N/A
5	3	High	High	Yes	Yes	No	Medium	High
6	5	High	High	Yes	Yes	No	Medium	Medium
7	4	High	High	Yes	Yes	No	Medium	Medium
8	2	Medium	Low	Yes	No	Yes	High	N/A
9	5	Medium	Medium	Yes	No	Yes	High	N/A
10	5	Medium	Medium	Yes	No	Yes	High	N/A
11	3	Medium	Low	Yes	No	Yes	High	N/A
12	4	Medium	Low	Yes	No	Yes	High	N/A
13	5	High	High	Yes	Yes	No	Medium	Medium
14	3	High	High	Yes	Yes	No	Medium	High

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 and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Community Capacity Building
Dam Failure	2, 3, 4, 9, 12, 13	1, 4	4	4	5, 11, 14		2, 3
Drought	2, 3, 12				5, 11, 14		2, 3
Earthquake	2, 3, 7, 12	1	8		5, 11, 14	7	2, 3, 8
Flood	2, 3, 4, 6, 9, 12, 13	1, 4	4	4	5, 11, 14	6	2, 3
Landslide	2, 3, 12	1			5, 11, 14		2, 3
Severe Weather	2, 3, 6, 12				5, 11, 14	6	2, 3
Wildfire	2, 3, 10, 12	1			5, 10, 11, 14		2, 3

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

1.11 REVIEW AND INCORPORATION OF INFORMATION FOR THIS ANNEX

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

- **Canyon County Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Canyon County Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- **Canyon County 2020 Comprehensive Plan —**The Comprehensive plan was reviewed for its land use directives with relevance to the natural hazards assessed by this plan
- **2018 Canyon County Emergency Operations Plan**—The Emergency Operations Plan was reviewed for consistency with the definition of critical facilities/infrastructure and to inform the identification of hazards of concern.
- **2013 Canyon County Hazard Mitigation Plan—**The Mitigation Plan was reviewed for the status of past mitigation actions.
- **Technical Reports and Information—**The following **o**utside resources and references were reviewed:
  - **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.
  - **COMPASS Demographic Reports 2019**

2. CITY OF CALDWELL

2.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
Ashley Newbry, Assistant City Engineer
621 Cleveland Blvd
Caldwell, ID 83605
Telephone: 208-455-4672
e-mail Address: anewbry@cityofcaldwell.org

Alternate Point of Contact
Robb MacDonald, City Engineer
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Caldwell, ID 83605
Telephone: 208-455-3006
e-mail Address:
rmacdonald@cityofcaldwell.org

This annex was drafted over the course of one month, with input from the City Engineer, Public Works Director, and Floodplain Administrator. They utilized resources such as the 2013 Canyon County Hazard Mitigation Plan, COMPASS Idaho demographics reports, FEMA flood maps, US Census Data, and the City of Caldwell 2040 Comprehensive Plan produced by the Planning & Zoning Department. The City Engineer provided input regarding development hot spots and trends within the City. The Public Works Director gave an update on the projects chosen for the 2013 Canyon County Hazard Mitigation Plan, as well as proposed projects to input into the 2020 Hazard Mitigation Plan. Development of this annex was carried out by the members of the local mitigation planning team, whose members are listed in Table 2-1.

Table 2-1. Local Mitigation Planning Team Members

Name	Title
Ashley Newbry	Project Engineer
Brent Orton	Director of Public Works
Jerome Mapp	Director of Planning and Zoning
Brett Clark	Building Official

2.2 JURISDICTION PROFILE

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation**— January 15, 1890
- **Current Population**— 61,210 (COMPASS of Southwest Idaho 2020)
- **Population Growth**— According to US Census.gov, the City of Caldwell had a population of 46,237 in 2010. Over the last 10 years, the City of Caldwell has consistently displayed a 2% to 3% growth trend each year. The growth anticipated since 2019 is anticipated to be much larger, perhaps near 10%. (US Census.gov and COMPASS Idaho)

- **Location and Description**— Covering an area of approximately 22 square miles with a 2019 resident population of approximately 58,830, Caldwell is located within the greater geographic region commonly known as the Treasure Valley. The community is situated adjacent to Interstate 84 and the Boise River, twenty miles from Idaho's capital, City of Boise. The topography is gently sloping with the city center at an elevation of 2,428 feet above sea level. Much of the urbanized area was originally covered by sagebrush and native grasses reflecting the arid climate. For the most part, this vegetation has been cleared as land was developed for agriculture or urban uses.
- **Brief History**—Caldwell's inception occurred largely as a result of the construction of the Oregon Short Line Railroad. Robert E. Strahorn came to the Boise River Valley in 1883 to select the route for the railroad. He rejected the grade into Boise City as too steep and chose a site thirty miles to the west. He drove his stake into an alkali flat of sagebrush and greasewood and the City of Caldwell was born. The town was named after one of Strahorn's business partners, Alexander Caldwell of Kansas.
- **Climate**—The City is within a transition area between steppe and desert, and consequently the climate is semi-arid to arid. Summers are warm and dry, and winters relatively mild. Temperatures range from an average 93 degrees high/58 degrees low in summer to 37 degrees high/21 degrees low in winter. Average annual precipitation is approximately 10.9 inches of rainfall and 13.5 inches of snowfall. (City of Caldwell Comprehensive Plan May 2010)
- **Governing Body Format**—City of Caldwell is governed by a seven member City Council, including the Mayor. The City consists of the following departments: Airport, Building Safety, Engineering, Mapping, Streets, Water, and Wastewater Treatment. The Caldwell City Council assumes responsibility for the adoption of this plan; the Public Works Director will oversee its implementation.

2.3 CURRENT TRENDS

Akin to the Treasure Valley as a whole, the City of Caldwell continues to see a sustained increase in the rate of development in residential and non-residential sectors. Since 2016 the City has seen a sharp increase in the quantity of multi-family development. Because the Boise and the Treasure Valley are presently (2015 to 2020) leading the nation in fastest growing cities, Idahoan residents demand affordable housing. Many local governments and politicians see multifamily residential development as the solution to this crisis. Even so, single family housing demand continues to outpace multifamily within the City of Caldwell.

Table 2-2 summarizes development trends in the performance period since development of the previous hazard mitigation plan and expected future development trends.

Table 2-2. Recent and Expected Future Development Trends

Criterion	Response
Has your jurisdiction annexed any land since the development of the previous hazard mitigation plan? • **If yes, give the estimated area annexed and estimated number of parcels.**	Yes There have been 39 annexations totaling 700.2 acres and 3 de-annexations totaling 155.54 acres for a net increase of 544.66 acres since 2013.
Is your jurisdiction expected to annex any areas during the performance period of this plan? • **If yes, please describe land areas and dominant uses.** • **If yes, who currently has permitting authority over these areas?**	Yes South Caldwell and East Caldwell are presently hot-spots for residential development. New tracts are annexing rapidly at present. Sky Ranch (business park) is partially developed and expected to attract additional commercial and light industrial development within the performance period of this plan. In addition, Northwest Caldwell is presently home to floodplain farming, a large gravel pit, and some private residences with ponds near the Boise River, but it has been identified for future commercial and industrial development. The permitting authority outside of Caldwell City limits is Canyon County. When a property chooses to annex into the City, the City becomes the permitting authority.
Are any areas targeted for development or major redevelopment in the next five years? • **If yes, please briefly describe, including whether any of the areas are in known hazard risk areas**	Yes Areas which are targeted for redevelopment include the Caldwell Downtown Core, which is bounded by the railroad tracks to Cleveland Blvd, from 5th Ave to 12th Ave. Indian Creek wanders through this zone. The floodway is mostly contained inside the Indian Creek Channel. No regulatory 100 year floodplain is mapped, but the entire Caldwell Downtown Core is inside the 500 year floodplain of Indian Creek.
How many permits for new construction were issued in your jurisdiction since the development of the previous hazard mitigation plan?	

	2014	2015	2016	2017	2018
Single Family	224	347	479	396	499
Multi-Family	12	0	4	47	108
Other (commercial, mixed use, etc.)	20	24	25	48	31

Please provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	• Special Flood Hazard Areas: 2013 = 1; 2014 = 4; 2015 = 3; 2016 = 5; 2017 = 3; 2018 = 5; 2019 = 3 • Landslide: 0 • High Liquefaction Areas: 0 • Tsunami Inundation Area: 0 • Wildfire Risk Areas: 0
Please 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.	"Level of buildout" is locally gauged, and sometimes negotiated, based on a City's *impact area*. Per the City Engineer, the City of Caldwell impact area could contain a population up to 300,000, which is approximately five times the present population. COMPASS estimates that the City of Caldwell will reach 80,000 by the year 2025. Unlike other local municipalities, the City of Caldwell is not bounded at its western extent, which theoretically increases the growth potential of the impact area without infringing on another City.

2.4 CAPABILITY ASSESSMENT

The City of Caldwell performed an assessment of its 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. This section summarizes the following findings of the assessment:

- An assessment of legal 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.

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.

Table 2-3. Legal and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	Yes	Yes	Yes
Comment: *Municipal Code 12-01-01: City of Caldwell adopts 2015 International Building Code.* *Idaho Building Code Act 39-41* *IDAPA 07.03.01 Rules of Building Safety ss 004.01: State of Idaho adopts 2015 International Building Code* *Recommendation: Revise Municipal Code 12-01-19 to use flood zone language and comply with current standards.*				
Zoning Code	Yes	Yes	No	Yes
Comment: *Idaho Code 46-10: Municipalities encouraged to manage development in flood zones.* *Municipal Code 10 (Zoning): Refers users to the Comprehensive Plan. Comprehensive plan acknowledges need to manage encroachment in the Boise River and Indian Creek 500- and 100-year floodplains.* *Recommendation: Revise Municipal Code 10-01-05 to refer to the current flood zone maps issued 2019. City should continue to place public parks in SFHAs.*				
Subdivisions	Yes	Yes	No	Yes
Comment: *Municipal Code 11-05-03: Floodplain Subdivisions or Floodplain PUD's* *Other jurisdiction: FEMA and 44 CFR 60.3* *Recommendation: 11-05-03 language may use different verbiage, but integration already exists.*				
Stormwater Management	Yes	Yes	Yes	Yes
Comment: *City of Caldwell Municipal Stormwater Management Manual* *Municipal Code 13-01: Stormwater Management and Discharge Control* *Other jurisdiction: Idaho DEQ IPDES Program, EPA NPDES Program for Municipalities (MS4)* *Recommendation: Stormwater code may wish to address best practices on BMP placement in or near a flood zone.*				
Post-Disaster Recovery	No	Yes	No	Yes
Comment: *No formal "post disaster recovery" plan. See 2015 Canyon County Emergency Operations Plan: page 161 "Long Term Community Recovery." Relies on County and State disaster assistance programs.* *Recommendation: Coordinate with municipalities within the jurisdiction if they are expected to participate or assist County efforts. Call this out in the plan.*				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Real Estate Disclosure	No	Yes	Yes	No
Comment: *Jurisdiction lead is not municipal.* *Idaho Code 55-2501: sellers must fill out RE-25 Property Condition Disclosure form.* *Recommendation: It is possible, but not likely, that a seller will not know they are in the floodplain. Coordination with a local Floodplain Administrator would be best practice on the part of the realtor.*				
Growth Management	No	No	No	No
Comment:				
Site Plan Review	Yes	No	No	Yes
Comment: *Assumes this item refers to development of the land, utilities, and public infrastructure around one or more buildings. If so, this is overseen by the Engineering Department.* *Municipal Code 13-03: Public Works Construction Standards* *2015 Idaho Standards for Public Works Construction (guidance, not regulation)* *City of Caldwell Supplemental Specifications to the 2015 Idaho Standards for Public Works Construction* *Recommendation: Allow for City Engineer or Floodplain Administrator discretion to require a higher standard of construction materials, methods, and capacity in the 100 year floodplain.*				
Environmental Protection	No	Yes	No	No
Comment: *The City of Caldwell does not have an ordinance focused strictly on environmental protection, but operates within the laws and requirements set forth by Idaho DEQ and EPA.*				
Flood Damage Prevention	Yes	Yes	Yes	Yes
Comment: *Municipal Code 12-15: Flood Damage Prevention* *Municipal Code 11-05-03: Floodplain Subdivisions or Floodplain PUD's* *Code 46-10: Municipalities encouraged to manage development in flood zones.* *Other jurisdiction: FEMA and 44 CFR 60.3* *Recommendation: Already integrated.*				
Emergency Management	No	Yes	Yes	Yes
Comment: *See 2015 Canyon County Emergency Operations Plan: page 161 "Long Term Community Recovery." Relies on County and State disaster assistance programs.* *Recommendation: Coordinate with municipalities within the jurisdiction if they are expected to participate or assist County efforts. Call this out in the plan.*				
Climate Change	No	No	No	No
Comment:				
Planning Documents				
Comprehensive plan	Yes	No	No	Yes
Is the plan compliant with Assembly Bill 2140? *Yes*				
Comment: *City of Caldwell has a 2040 Comprehensive Plan which incorporates special hazard areas.* *Recommendation: Although the Comp Plan is already integrated on a basic level, it could benefit from further detail provided by the City Floodplain Administrator.*				
Capital Improvement Plan	Yes	No	No	Yes
How often is the plan updated? *Annually*				
Comment: *The Public Works CIP is not a formalized document. It is a workbook of spreadsheets which contain public works projects scheduled up to five years out. These could be prioritized differently, depending on whether they minimize an existing hazard.*				
Disaster Debris Management Plan	No	No	No	No
Comment:				
Floodplain or Watershed Plan	No	No	No	No
Comment:				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Stormwater Plan	Yes	No	No	Yes
Comment: *City of Caldwell Municipal Stormwater Management Manual* *Municipal Code 13-01: Stormwater Management and Discharge Control* *Other jurisdiction: Idaho DEQ IPDES Program, EPA NPDES Program for Municipalities (MS4)* *Recommendation: Stormwater code may wish to address best practices on BMP placement in or near a flood zone.*				
Urban Water Management Plan	Yes	No	No	Yes
Comment: *The City has a (drinking) Water Master Plan, but the last iteration was completed in 2009. There may be room for protecting infrastructure in a special hazard area in the next plan, depending on the location of planned improvements.*				
Habitat Conservation Plan	No	No	No	No
Comment:				
Economic Development Plan	No	No	No	Yes
Comment: *Economic Development is a part of the City's 2040 Comprehensive Plan, which already includes review of special hazard areas in the City. (See Comprehensive Plan comments.)*				
Shoreline Management Plan	No	No	No	No
Comment:				
Community Wildfire Protection Plan	No	Yes	No	Yes
Comment: *We suspect that the* Canyon County Community Wildfire Protection Plan exists, but it may be outdated and therefore, no longer publicly available. Updating this hazard mitigation plan is an integrated work effort with updating the Canyon County Community Wildfire Protection Plan.				
Forest Management Plan	No	No	No	No
Comment:				
Climate Action Plan	No	No	No	No
Comment:				
Comprehensive Emergency Management Plan	No	Yes	Yes	Yes
Comment: *State of Idaho has a 2017 Emergency Operations Plan, prepared by the Idaho Office of Emergency Management. It is already integrated via inclusion of specific hazard annexes.*				
Threat & Hazard Identification & Risk Assessment	No	Yes	Yes	Yes
Comment: *Per the 2013 Canyon County Hazard Mitigation Plan, the* Canyon County Threat and Hazard Identification and Risk Assessment which is currently being developed.				
Post-Disaster Recovery Plan	No	Yes	Yes	Yes
Comment: *See State of Idaho 2017 Emergency Operations Plan ID-ESF #14, prepared by the Idaho Office of Emergency Management. It is already integrated via inclusion of specific hazard annexes.*				
Continuity of Operations Plan	No	Yes	Yes	Yes
Comment: *See State of Idaho 2017 Emergency Operations Plan "Basic Plan" Item VII, prepared by the Idaho Office of Emergency Management. It is already integrated via inclusion of specific hazard annexes.*				
Public Health Plan	No	No	No	No
Comment:				

Table 2-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? • **If no, who does? If yes, which department?**	Yes Building Dept
Does your jurisdiction have the ability to track permits by hazard area?	No
Does your jurisdiction have a buildable lands inventory?	No

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	Yes—water, sewer, irrigation
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?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Planning & Zoning—City of Caldwell Engineering—City of Caldwell
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering—City of Caldwell Building—City of Caldwell
Planners or engineers with an understanding of natural hazards	Yes	Engineering—City of Caldwell (floodplain administrator)
Staff with training in benefit/cost analysis	No	Could be hired on contract
Surveyors	No	Could be hired on contract
Personnel skilled or trained in GIS applications	Yes	Mapping—City of Caldwell
Scientist familiar with natural hazards in local area	Yes	Engineering—City of Caldwell
Emergency manager	No	Canyon County Ambulance District
Grant writers	Yes	Grant Writer: Elizabeth McNannay City of Caldwell Contract

Table 2-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes (typically City Clerk at City Hall)
Do you have personnel skilled or trained in website development?	No
Do you have hazard mitigation information available on your website? • **If yes, briefly describe.**	No We provide a link to FEMA flood maps.
Do you use social media for hazard mitigation education and outreach? • **If yes, briefly describe.**	No We have not done this historically, but the City has a Facebook.
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • **If yes, briefly describe.**	No
Do you have any other programs already in place that could be used to communicate hazard-related information? • **If yes, briefly describe.**	No In our area, the hazard outreach and planning often happens at the County or State level.
Do you have any established warning systems for hazard events? • **If yes, briefly describe.**	No Canyon County uses AlertSense.

Table 2-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	City of Caldwell Engineering Dept
Who is your floodplain administrator? (department/position)	Engineering/Asst City Engr or Proj. Engr
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	3/4/2019
Does your floodplain management program meet or exceed minimum requirements? • **If exceeds, in what ways?**	Exceeds Require FF at 1 foot freeboard above base flood elevation.
When was the most recent Community Assistance Visit or Community Assistance Contact?	12/2016
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • **If so, state what they are.**	Yes 2800 E Chicago—Placement of materials & bridges in floodway with no permits.
Are any RiskMAP projects currently underway in your jurisdiction? • **If so, state what they are.**	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • **If no, state why.**	Yes, but… We believe there is a fundamental problem with placing a floodway on agricultural drain, which is closely managed. This regulatory action overly-complicates the necessary activity of dredging the drain in agricultural areas.

Criterion	Response
Does your floodplain management staff need any assistance or training to support its floodplain management program? • **If so, what type of assistance/training is needed?**	Yes Assistance with inspection activity Assistance with website material
Does your jurisdiction participate in the Community Rating System (CRS)? • **If yes, is your jurisdiction interested in improving its CRS Classification?** • **If no, is your jurisdiction interested in joining the CRS program?**	Yes No No
How many flood insurance policies are in force in your jurisdiction?*b* • **What is the insurance in force?*a*** • **What is the premium in force?*b***	29 $6,333,000 (2019) $12,788
How many total loss claims have been filed in your jurisdiction?*b* • **How many claims are still open or were closed without payment?** • **What were the total payments for losses?**	1 1 (closed without payment) $0

a. According to FEMA NFIP loss report(s) statistics as of February 29, 2020
b. As of 5/5/2020 from Scott Van Hoff, scott.vanhoff@fema.dhs.gov

Table 2-9. Community Classifications

	Participating?	Classification	Date Classified
Community Rating System	No	Not classified	Not applicable
Building Code Effectiveness Grading Schedule	No	(99) Not classified	1997
Public Protection	Yes	3	2019
Storm Ready	Yes	participant	unknown
Firewise	No	Not classified	Not applicable

2.5 INTEGRATION WITH OTHER PLANNING INITIATIVES

The goal of plan integration is to ensure that the potential impact of hazards is considered in planning for future development. 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).

Review of the plans, programs and ordinances identified in the capability assessment tables identifies plans and programs that have already been integrated with the goals and recommendations of the hazard mitigation plan, and those that offer opportunities for future integration.

2.5.1 Existing Integration

The following plans or ordinances already address potential impacts or include specific projects that should be included as action items in the mitigation action plan:

- **Subdivisions:** Municipal Code 11-05-03 language may wish to use different verbiage pertaining to flood zones, but integration already exists. This section restricts construction of structures in the floodway, and it requires a 50 ft buffer.
- **Flood Damage Prevention:** Municipal Code 12-15: Flood Damage Prevention and Municipal Code 11-05-03: Floodplain Subdivisions or Floodplain PUD's are drafted to meet NFIP compliance measures.
- **Comprehensive Plan:** City of Caldwell has a 2040 Comprehensive Plan which incorporates special hazard areas. Although the Comp Plan is already integrated on a basic level, it could benefit from further detail provided by the City Floodplain Administrator.

2.5.2 Opportunities for Future Integration

The following plans or ordinances present opportunities for future integration of action items in the mitigation action plan:

- **Building Code:** Recommend revising Municipal Code 12-01-19 to use flood zone language and comply with current standards.
- **Zoning Code:** Recommend revision of Municipal Code 10-01-05 to refer to the current flood zone maps issued 2019. City should continue to place public parks in SFHAs.
- **Stormwater Management:** Recommend that stormwater code address best practices on BMP placement in or near SFHAs.
- **Site Plan Review:** Allow for City Engineer or Floodplain Administrator discretion to require a higher standard of construction materials, methods, and capacity in the 100 year floodplain.
- **Capital Improvement Plan:** The Public Works CIP is not a formalized document. It is a workbook of spreadsheets which contain public works projects scheduled up to five years out. These could be prioritized differently, depending on whether they minimize an existing hazard.
- **Stormwater Plan:** Stormwater code may wish to address best practices on BMP placement in or near a flood zone.

2.6 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 2-10 lists past occurrences of natural hazards that affected the City of Caldwell. Other hazard events that broadly affected the entire planning area, including the City of Caldwell, 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 # (if applicable)	Date	Damage Assessment
Covid-19 Pandemic	DR-4534	4/8/2020	$238,000.56 public assist
Flooding (Ada & Canyon Co)	DR-4342	10/7/2017	$2,874,403.26 public assist

2.7 HAZARD RISK RANKING

Table 2-11 presents a local ranking for the City of Caldwell of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 2-11. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Earthquake [b]	32	High
2	Severe Weather [e]	27	Medium
3	Flooding [c]	18	Medium
3	Landslide [f]	18	Medium
4	Drought [g]	16	Medium
5	Dam Failure [d]	15	Medium
6	Wildfire [a]	6	Low

a. Based on High, Moderate-High and Moderate Fire Severity Zones
b. Based on the Squaw Creek M7.0 scenario
c. Based on 100 year or 1 percent annual chance hazard results used for risk ranking
d. Based on the aggregation of all dam failure scenarios
e. Severe weather is assessed more qualitatively than other hazards. Assumptions for risk ranking include high probability, medium impact on people, low impact on property and low impact on economy.
f. Slope greater than 30% and slope 15% to 30% areas were utilized for risk ranking
g. Drought is assessed more qualitatively than other hazards. Generally, drought does not cause injury or death to people or result in property damage. Assumptions for risk ranking include high probability, no impact on people, low impact on property and medium impact on economy.

2.8 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 the jurisdiction.

2.8.1 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: 0

2.8.2 Other Noted Vulnerabilities

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

- The City of Caldwell Wastewater Treatment Plant is located in the Boise River and Indian Creek 100-year floodplains (1 percent chance).
- Caldwell Fire Station 1 and nearly all of old town Caldwell (west of 12th Ave) are located in the Indian Creek 500-year floodplain (0.2 percent chance). The risk rating estimates that 18 percent of Caldwell property is located in the 500-year floodplain (0.2 percent chance).
- The City's storm drain system is co-mingled with irrigation runoff, which reduces system capacity during irrigation season.
- At Boise River high flows (above 6,000 cubic feet per second) west Caldwell storm drains are submerged and can surcharge.
- Canyon Hill and surrounding areas could be susceptible to earthquake and landslide damage due to the drastic elevation change from the base to the top (approximately 100 feet).
- The Chicago Street Bridge crosses the Boise River and is therefore susceptible to log jams and high River flows.

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

2.9 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.

Table 2-12. Status of Previous Plan Actions

Action Item	Completed	Removed; No Longer Feasible	Carried Over to Plan Update: Check if Yes	Carried Over to Plan Update: Enter Action #
Construct diversion gates to direct floodwaters from the Boise River to the Dixie Slough.		X		1
Comment: *The Dixie Drain is hydraulically higher than the Boise River. Eventually, it is tributary to the Boise River outside of Caldwell city limits. We no longer think that this would be an advantageous flow path for control of flood water in Caldwell.*				
Place engineered dikes along the River channel through Caldwell.		X		2
Comment: *Much of the Boise River is sandwiched on either side by the Greenbelt. Within the City of Caldwell, the Riverside Canal also borders the Boise River. Instead of placing engineered dikes along the River, the City has repeatedly chosen to place City parks along the Boise River and Indian Creek corridors (floodway).*				
Raise the banks on the larger canals that run through Caldwell.		X		3
Comment: *This activity does not fall under the City's jurisdiction. Canals without floodplain should be managed by the regional irrigation district. For canals with floodplain, we do not encourage fill in the floodplain or floodway.*				
Develop policies that all local irrigation districts must open their head gates tor irrigation canals and itches to divert floodwaters on to fields.		X		4
Comment: *After some investigation, we believe this is an emergency operations type of policy that would need to be overseen by Idaho Department of Water Resources, or the regulatory authority over irrigation districts. The City does not have regulatory authority to require irrigation districts to open head gates onto private property in the event of a flood.*				
Concrete the banks of the Phyllis Canal.		X		5
Comment: *Lining the banks of the Phyllis Canal may add structural integrity, but it would not decrease flood risks associated with the Canal's failure. Operation and maintenance of the Phyllis Canal falls under the jurisdiction of Pioneer Irrigation District.*				

Action Item	Completed	Removed; No Longer Feasible	Carried Over to Plan Update: Check if Yes	Carried Over to Plan Update: Enter Action #
Concrete the banks of the Canyon Hill Lateral.		X		6
Comment: *Lining the banks of the Canyon Hill Lateral may add structural integrity, but it would not decrease flood risks associated with the Lateral's failure. Operation and maintenance of the Canyon Hill Lateral falls under the jurisdiction of Pioneer Irrigation District. In addition, some parts of the Canyon Hill Lateral have recently been piped near its intersection with Linden St and Smeed Pkwy in Caldwell.*				
Concrete the banks of the Notus Canal.		X		7
Comment: *Lining the banks of the Notus Canal may add structural integrity, but it would not decrease flood risks associated with the Canal's failure. Operation and maintenance of the Notus Canal falls under the jurisdiction of Black Canyon Irrigation District. In addition, some parts of the Canyon Hill Lateral have recently been piped near its intersection with Linden St and Smeed Pkwy in Caldwell.*				
Replace the culvert where Mason Creek crosses Mason Road.		X		8
Comment: *Increasing culvert capacities, where possible, is good practice for the purposes of reducing flood damage. In this instance, the Mason Creek culvert beneath Mason Road is not inside Caldwell city limits or its impact area.*				
Protect the WWTP Clarifier No. 2 from flooding.			X	9
Comment: *Caldwell has two primary clarifiers which are relatively close to existing grade. As the City continues to grow, the WWTP must expand to accommodate additional flow. The City will continue to consider engineering measures to protect the treatment infrastructure from high groundwater and SFHAs.*				

2.10 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 2-13 lists the actions that make up the City of Caldwell hazard mitigation action plan. 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

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #C1— Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including the City of Caldwell.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, wildfire	1, 3, 4, 5, 6, 7, 8, 10, 11, 12	City of Caldwell	P{planning and Zoning	Low	Staff Time, General Funds	Ongoing
Action #C2— Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildfire	1, 3, 4, 5, 6, 8, 10, 12	Canyon County	City of Caldwell	Low	Staff Time, General Funds	1-5 years

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #C3—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.							
New and Existing	Dam failure, flooding, landslide, severe weather	1, 2, 4, 5, 6, 8, 10, 11, 12	City of Caldwell	Engineering	Low	Staff Time, General Funds	Ongoing
Action #C4—Protect WWTP infrastructure from flooding. (Action #9 kept from 2013 Canyon County Hazard Mitigation Plan.) Could include creation of an engineered dike, or ensuring all WWTP infrastructure is engineered to withstand flood pressure and buoyancy needs.							
New and Existing	Dam failure, flooding, earthquake, landslide, severe weather	1, 3, 7, 9, 10, 12	City of Caldwell	N/A	Medium	HMGP, Sewer Budget	Ongoing
Action #C5—As old bridges and culverts are replaced throughout the City, upsize them as needed to ensure the current 100 year event (1% chance flood) can be passed. For example, increase the culvert capacity for Indian Creek when Ustick Road is widened.							
New	Dam failure, flooding, landslide, severe weather	1, 2, 3, 9, 10, 12	City of Caldwell	Canyon Highway District # 4	Low	HMGP, PDM, FMA, Urban Renewal	Ongoing
Action #C6—Purchase backup diesel generators to equip all treatment infrastructure, wells, lift stations, and pressure booster stations.							
New and Existing	Dam failure, drought, flooding, earthquake, landslide, severe weather, wildfire	1, 3, 7, 9, 10, 12	City of Caldwell	N/A	High	HMGP, PDM	Short Term
Action #C7—Continue to purchase land in local floodplains for public open space (City parks and pedestrian pathways). For example, develop the City-owned Plymouth Street parcel as a park in the Boise River floodway. Continue to purchase and demolish buildings located atop Indian Creek. Purchase land near the Boise River for well-managed biosolids handling.							
New and Existing	Dam failure, flooding, earthquake, landslide, severe weather	1, 2, 3, 4, 6, 8, 9, 10, 11, 12	City of Caldwell	Idaho DEQ	High	HMGP, PDM, FMA	As Available (Long term)
Action #C8—Demolish the existing and construct the new Plymouth Street Bridge over the Boise River.							
New	Dam failure, flooding, earthquake, landslide, severe weather	1, 2, 9, 12	Canyon Highway District # 4	City of Caldwell	High	HMGP, PDM, FMA	Long Term
Action #C9—Perform a detailed floodplain study to establish base flood elevations for the Wilson Drain near its confluence with Indian Creek. (It is presently an "A" Zone SFHA.)							
New	Flooding, severe weather	1, 2, 4, 5, 6, 9, 12	City of Caldwell	Canyon County Fair (campus)	Low	HMGP	Short term
Action #C10—Reduce groundwater infiltration into the sewer collection system. This would increase WWTP capacity and reduce the need for facility expansion (in the 100 year floodplain).							
Existing	Dam failure, flooding, severe weather	1, 3, 9, 10, 12	City of Caldwell	N/A	High	HMGP, PDM, FMA	Long Term

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #C11—Create a capital improvement plan for reducing the quantity of stormwater discharge to surface waters in locations with older or existing development. (Increase storage capacity.)							
Existing	Dam failure, flooding, earthquake, landslide, severe weather	1, 3, 4, 9, 11, 12	City of Caldwell	N/A	Low	HMGP	Short Term
Action #C12—Create a City-owned fuel supply and storage station, which is readily available in the event of a disaster.							
New	Dam failure, flooding, earthquake, landslide, severe weather, wildfire	1, 3, 5, 9, 10, 12	City of Caldwell	N/A	High	General fund	Short Term
Action #C13—Create a catch basin (storm drain) cleaning prioritization program to ensure that drains which receive the most debris are cleaned more frequently than others.							
Existing	Flooding, landslide, severe weather	1, 3, 4, 9, 10, 11, 12	City of Caldwell	N/A	Low	Staff Time, General Funds	Short Term
Action #C14—Install one-way or duckbill gates on the storm drain outfalls at the Boise River, in order to prevent surcharging due to high flow volumes in the River.							
Existing	Dam failure, flooding, severe weather	1, 3, 9, 10, 12	City of Caldwell	N/A	Low	HMGP, PDM, FMA, MS4 Budget	Short Term

Table 2-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]
C1	10 out of 12	Medium	Low	Yes	No	Yes	High	Low
C2	8 out of 12	Medium	Low	Yes	No	Yes	High	Low
C3	9 out of 12	Medium	Low	Yes	No	Yes	High	Low
C4	6 out of 12	High	Medium	Yes	Yes	Yes	Medium	High
C5	6 out of 12	High	Low	Yes	Yes	Yes	High	High
C6	6 out of 12	High	High	Yes, equal	Yes	No	Low	High
C7	10 out of 12	Medium	High	No	Yes	Yes	Low	High
C8	4 out of 12	High	High	Yes, equal	Yes	Yes	Medium	Medium
C9	7 out of 12	Low	Low	Yes, equal	Yes	Yes	High	Medium
C10	5 out of 12	Low	High	No	Yes	No	Low	Medium
C11	6 out of 12	Low	Low	Yes, equal	Yes	No	Low	Medium
C12	6 out of 12	High	High	Yes, equal	No	No	Low	High
C13	7 out of 12	Medium	Low	Yes	Yes	Yes	High	Low
C14	5 out of 12	High	Low	Yes	Yes	Yes	High	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	Community Capacity Building
All Hazards	C1, C2, C6	C1, C2	C1	C1, C6	C1, C2, C6, C12	C12	C1, C2, C6, C12
Dam Failure	C4, C5, C7, C10, C11	C3, C4, C5, C7, C8, C10, C11, C14	C3	C3, C4, C5, C7, C11	C4, C8, C10	C4, C5, C8, C10, C11, C14	C3, C4, C5, C7, C8, C10, C11, C14
Drought							
Flooding	C3, C4, C5, C7, C9, C10, C11, C13, C14	C3, C4, C5, C9, C10, C11, C13, C14	C3	C3, C4, C5, C7, C9, C11, C13	C4, C5, C8, C10, C13	C3, C4, C5, C8, C10, C11, C14	C3, C4, C5, C7, C8, C9, C10, C11, 13, C14
Earthquake	C4, C7	C4, C11		C4, C7, C11	C4, C8		
Landslide	C13	C3, C4, C5, C7, C11	C3	C3, C11	C8, C13	C3	C3, C7, C11, C13
Severe Weather	C3, C4, C5, C7, C8, C9, C10, C11, C13, C14	C3, C4, C5, C7, C9, C10, C11, C13, C14	C3	C3, C4, C5, C7, C9, C11, C13	C4, C5, C8, C10, C13, C14	C4, C5, C8, C10, C11, C14	C3, C4, C5, C7, C8, C9, C10, C11, C13, C14
Wildfire							

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

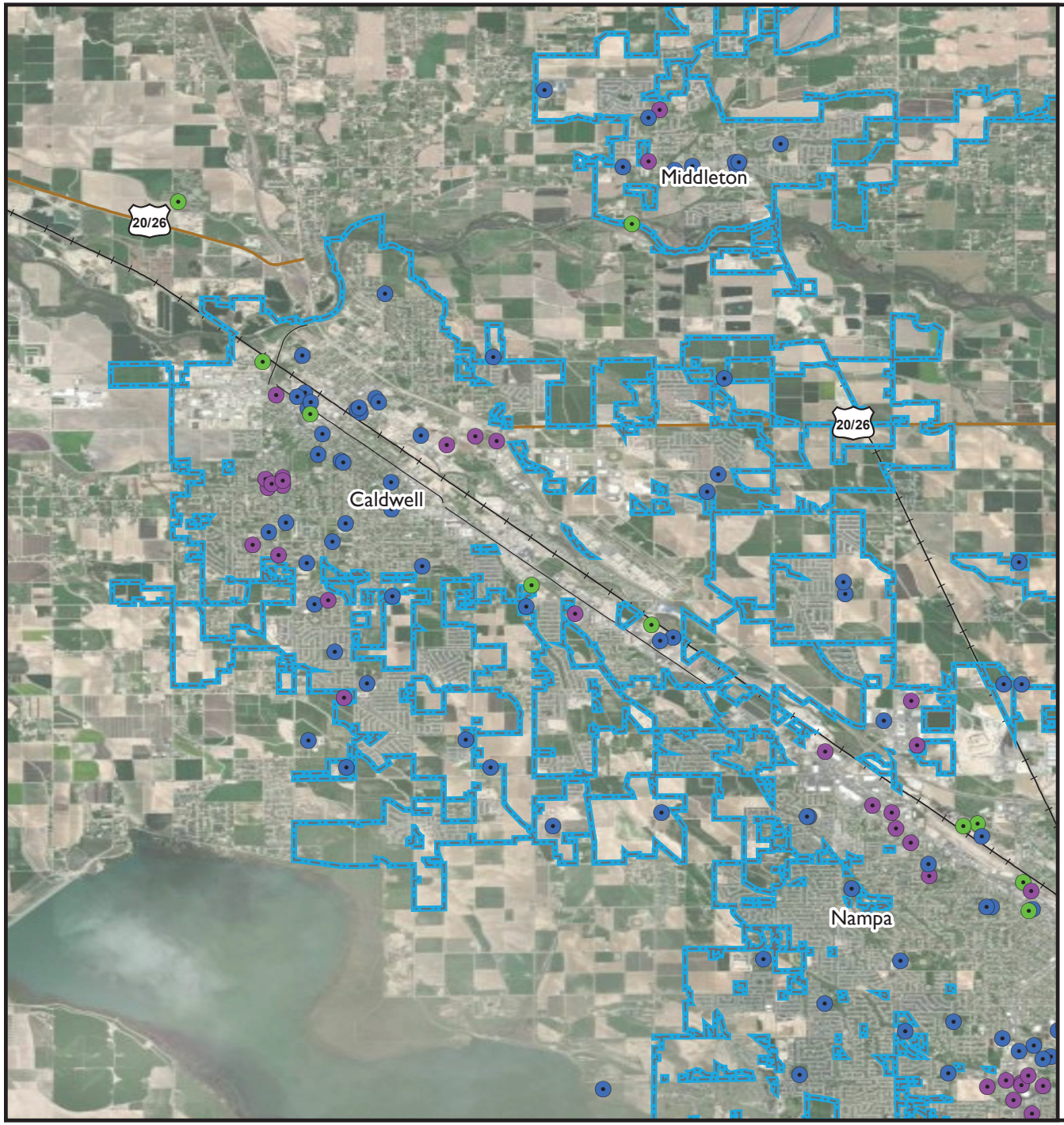
2.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The City of Caldwell has two relatively large "A" Zone SFHAs—the Wilson Drain and the Dixie Drain. These will likely need to be studied further to determine their extent and capacity (base flood elevations).

2.12 REVIEW AND INCORPORATION OF INFORMATION FOR THIS ANNEX

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

- **City of Caldwell Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of Caldwell Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- **2040 Caldwell Comprehensive Plan**
- **2013 Canyon County Hazard Mitigation Plan—**The Mitigation Plan was reviewed for the status of past mitigation actions.
- **Technical Reports and Information—**The following **o**utside resources and references were reviewed:
  - **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.
  - **COMPASS Demographic Reports 2019**



City of Caldwell

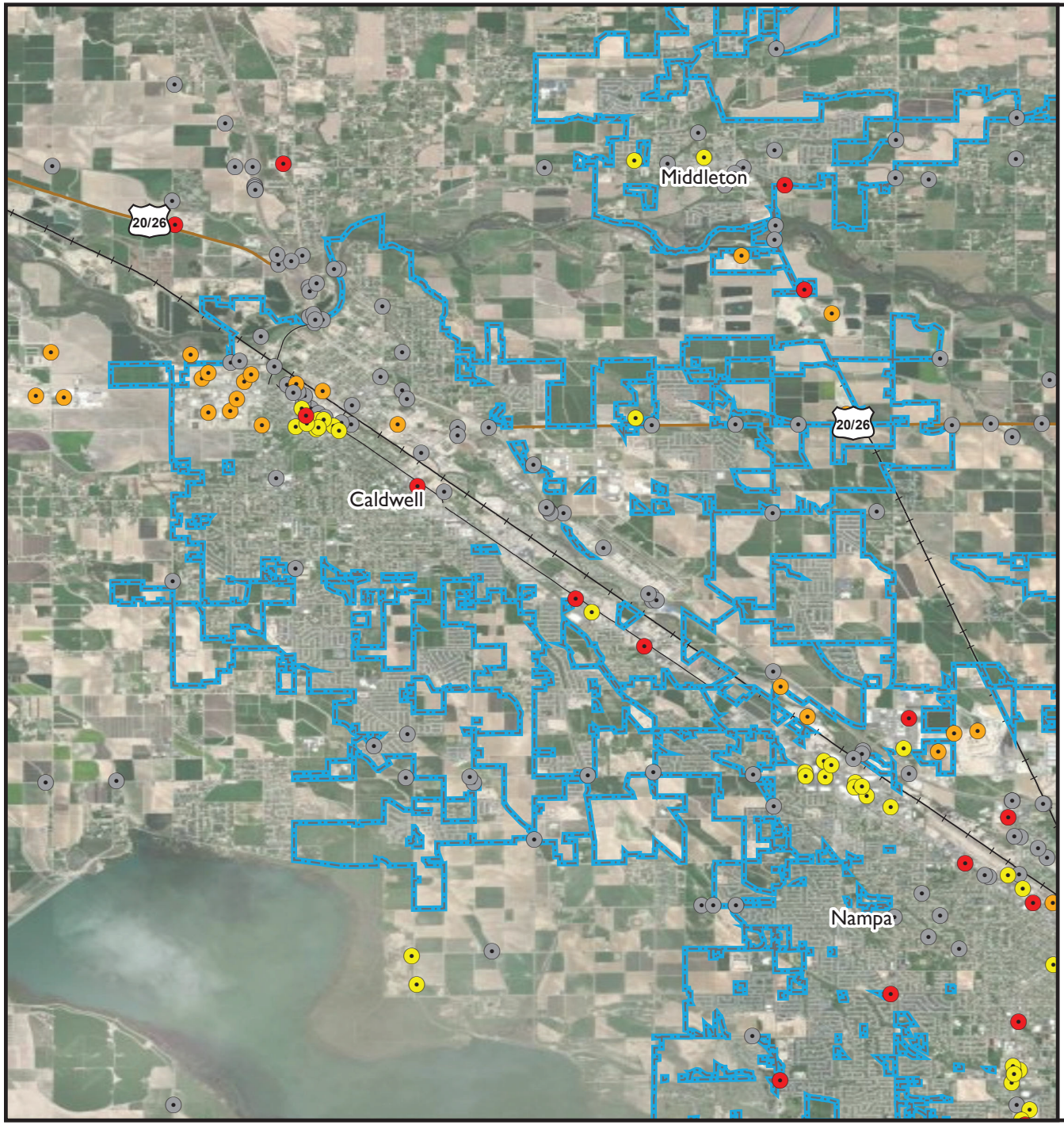
Critical Facilities (1 of 2)

- Food, Water, Shelter
- Health and Medical
- Safety and Security
- City Limits
- Canyon County

0 1.5 3 Miles

N
W E
S

Data Sources: Boundaries & Facilities: Canyon County GIS, 2020; HIFLD, 2020; Hazus v4.2 SP03; Basemap: ESRI, 2020



City of Caldwell

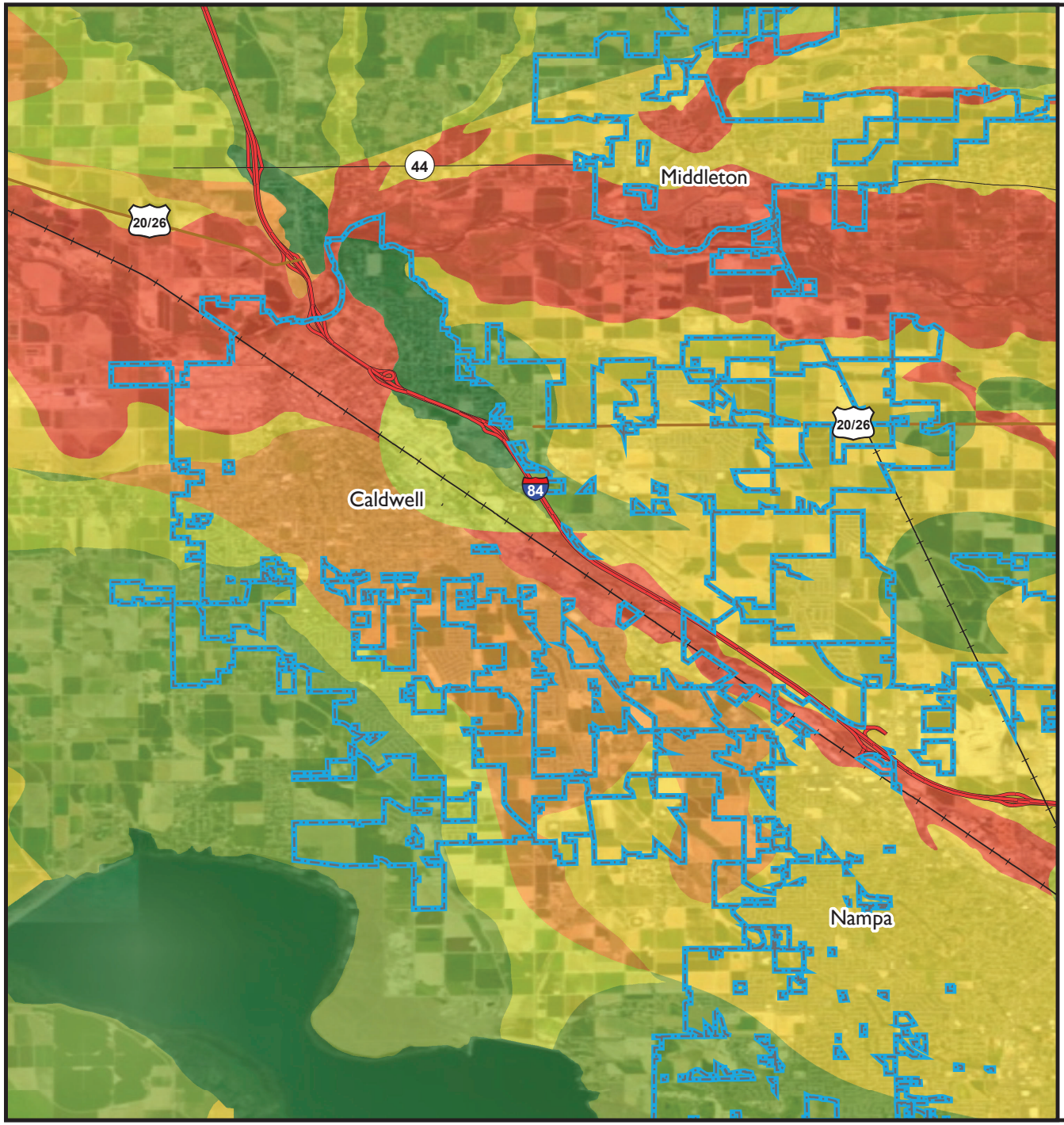
Critical Facilities (2 of 2)

- Communications
- Energy
- Hazardous Material
- Transportation
- City Limits
- Canyon County

0 1.5 3 Miles

N
W E
S

Data Sources: Boundaries & Facilities: Canyon County GIS, 2020; ITD 2020; EPA 2020; HIFLD, 2020; Hazus v4.2 SP03; Basemap: ESRI, 2020



City of Caldwell

Liquefaction Susceptibility

City Limits

Canyon County

Liquefaction Susceptibility Class

0 (least susceptible)

1

2

3

4

5 (most susceptible)

0 2 4

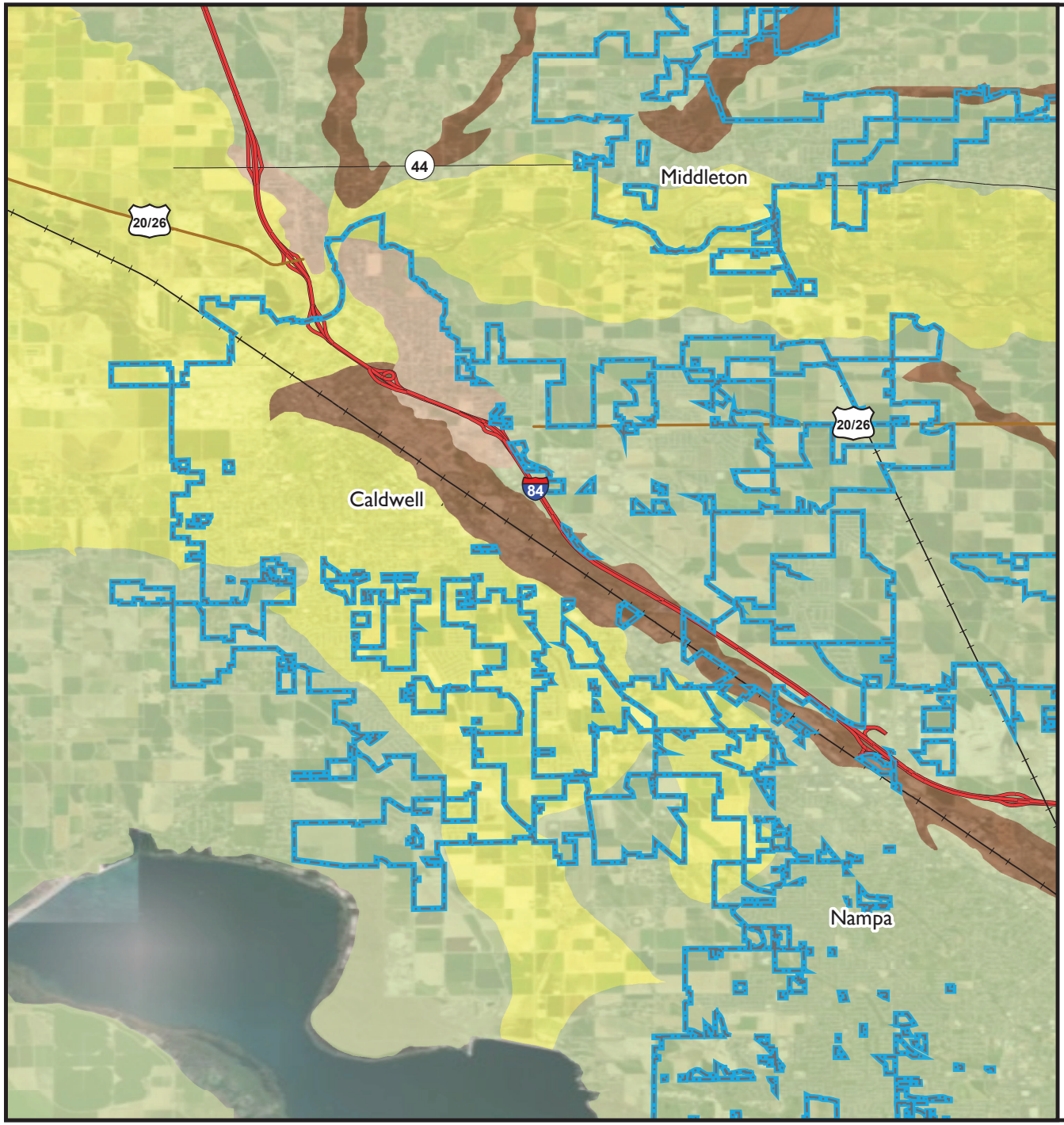
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Liquefaction Susceptibility: ID Geological Survey, 2011; ESRI Basemap, 2020



City of Caldwell

NEHRP Soil

City Limits

Canyon County

NEHRP Soil Class

B (hard rock)

C (very dense soil and soft rock)

D (stiff soil)

E (soft soil)

0 2 4

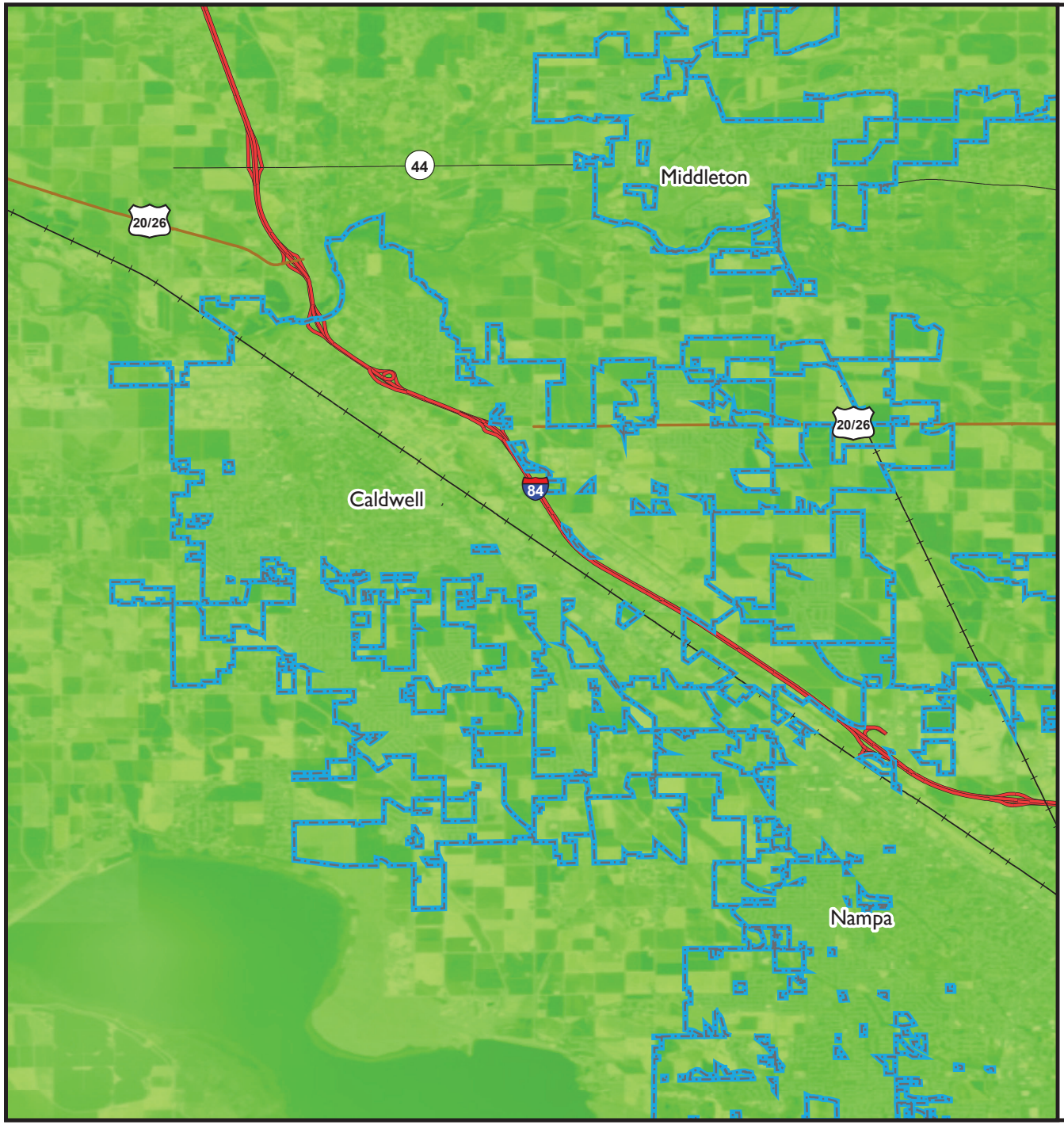
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, NEHRP Soils: ID Geological Survey, 2011; ESRI Basemap, 2020



City of Caldwell

Cottonwood M7.0
Earthquake Event

City Limits

Canyon County

Modified Mercalli Intensity Scale

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

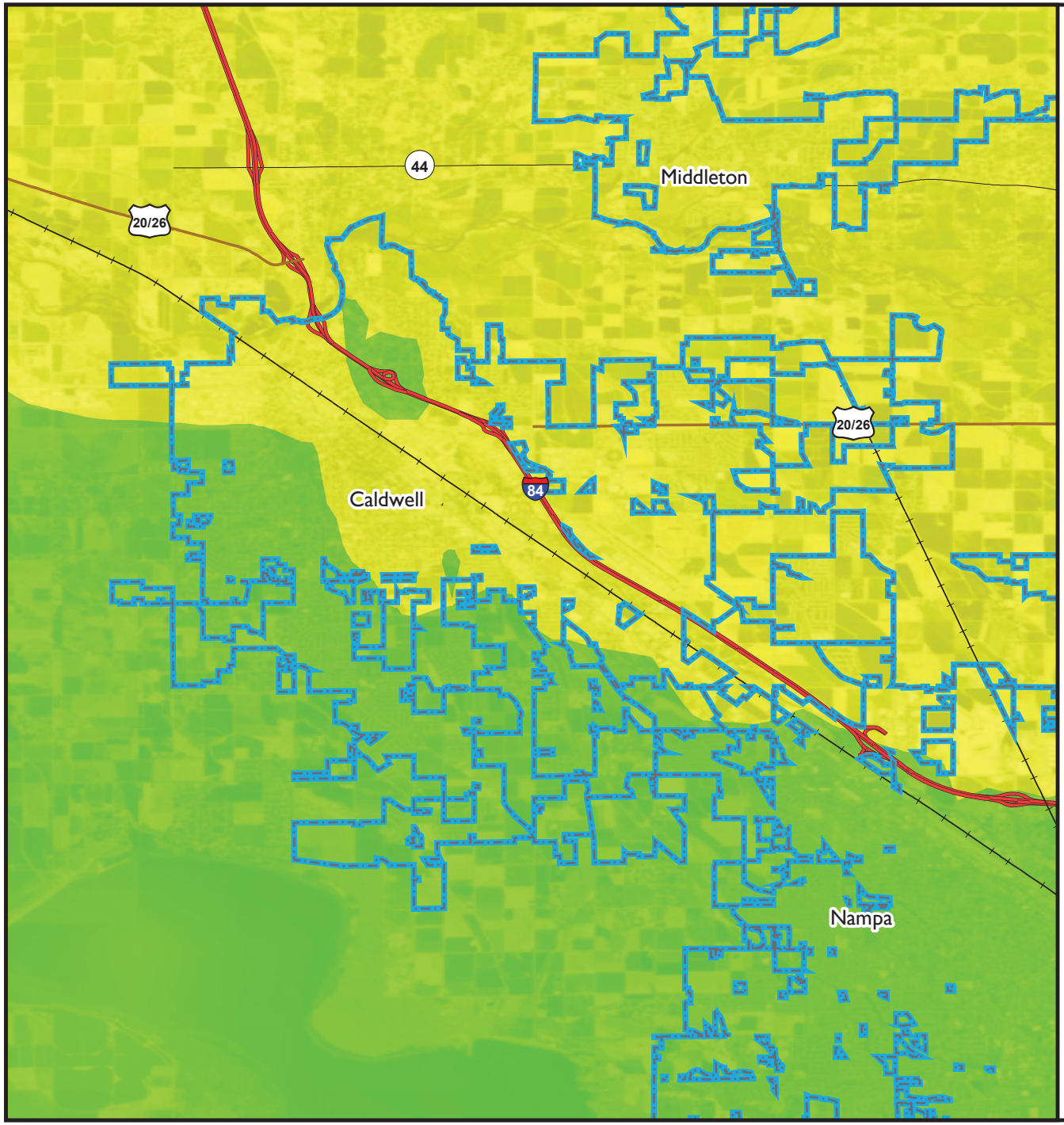
Intensity scale described as:
(potential damage – perceived shaking)

0 2 4

Miles

N
W E
S

Data Sources: Canyon County GIS, 2020, Earthquake: USGS, 2017; ESRI Basemap, 2020



City of Caldwell

Squaw Creek M7.0
Earthquake Event

City Limits

Canyon County

Modified Mercalli Intensity Scale

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

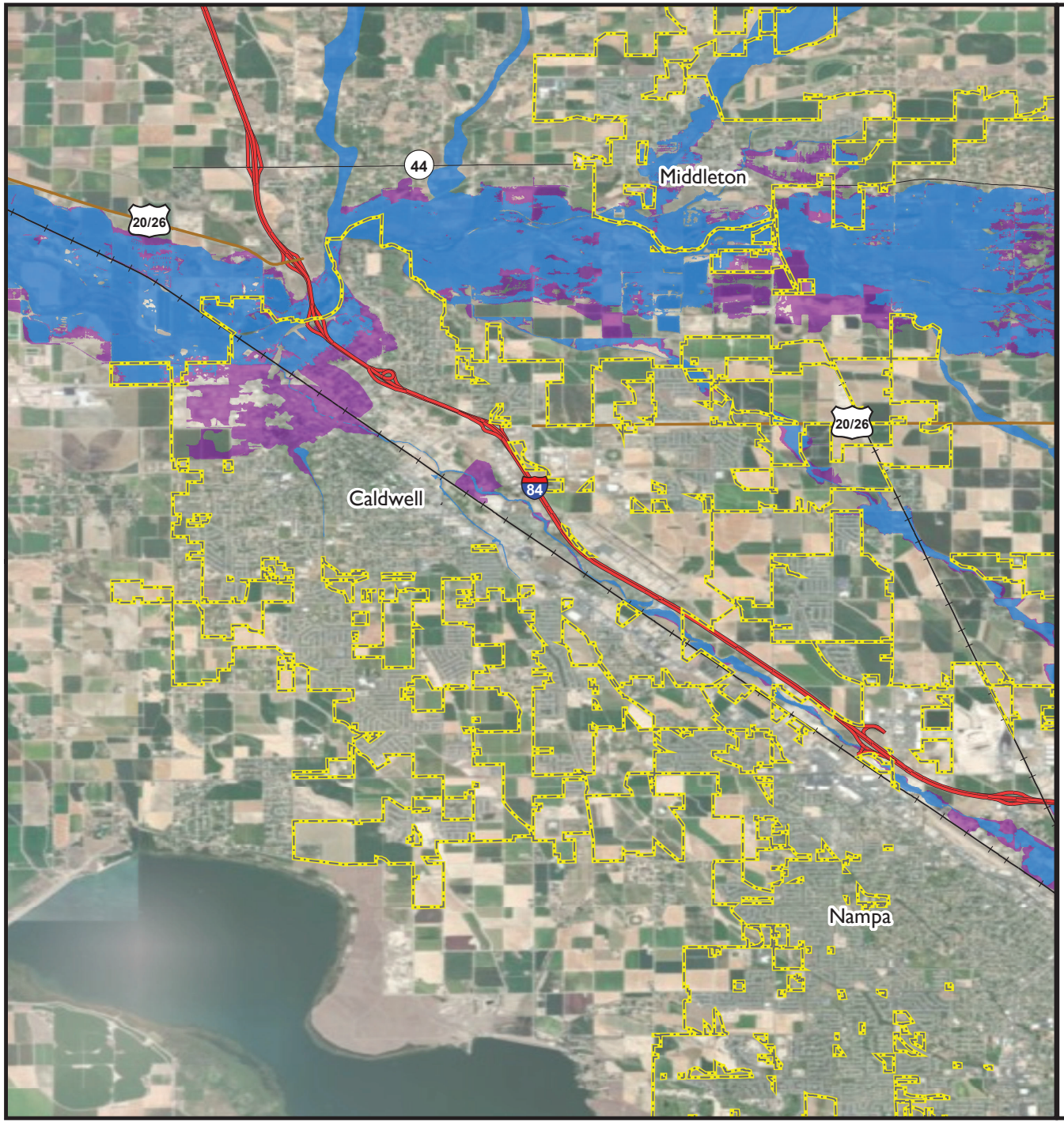
Intensity scale described as:
(potential damage – perceived shaking)

0 2 4

Miles

N
W E
S

Data Sources: Canyon County GIS, 2020, Earthquake: USGS, 2017; ESRI Basemap, 2020



City of Caldwell

Flood Hazard

City Limits

Canyon County

1% Annual Chance Flood

0.2% Annual Chance Flood

0 1.5 3

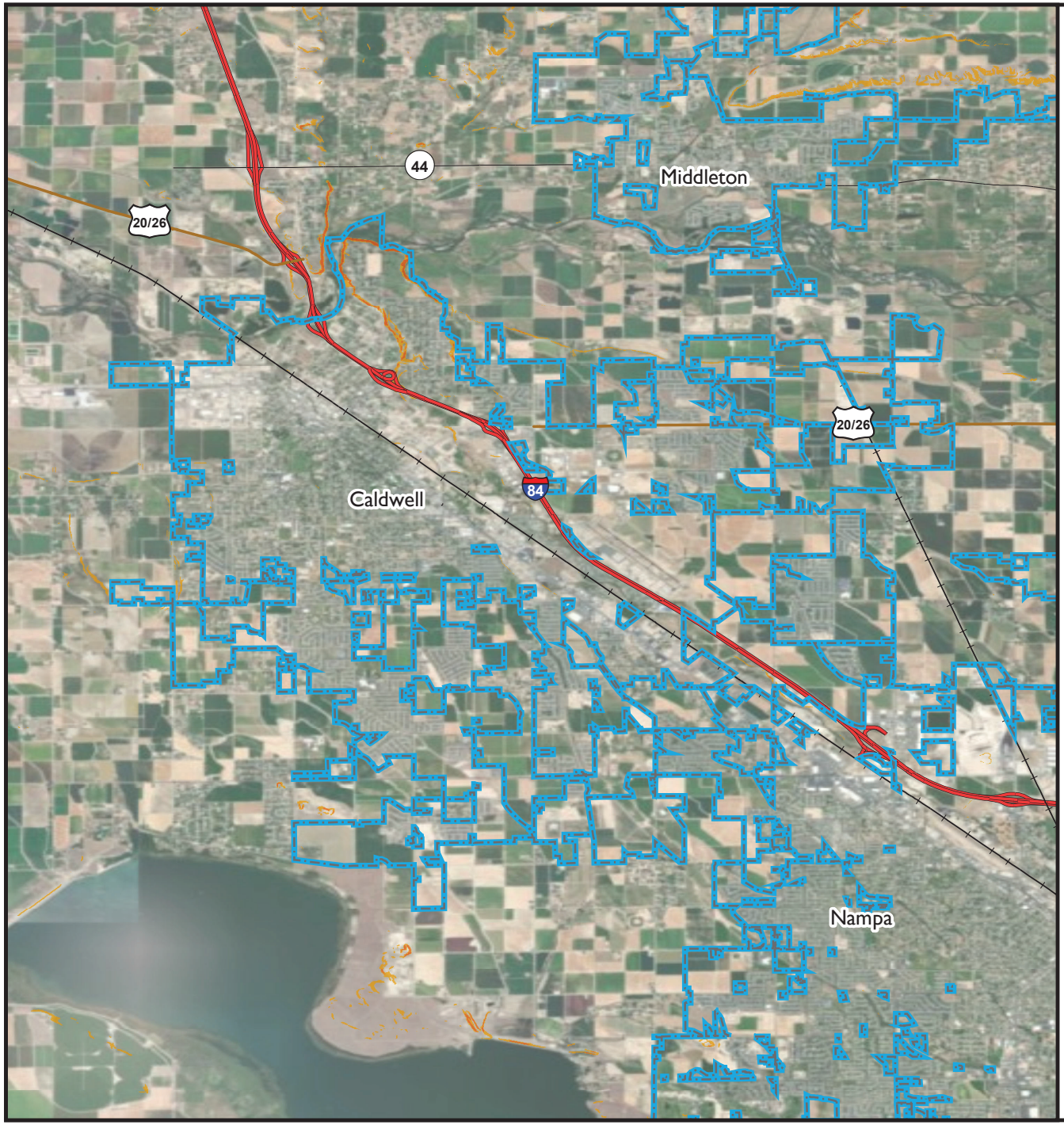
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Flood: FEMA, 2020; ESRI Basemap, 2020



City of Caldwell

Landslide Hazard

City Limits

Canyon County

Landslide Susceptibility

15 to 30 Percent Slope

Greater than 30 Percent Slope

0 2 4

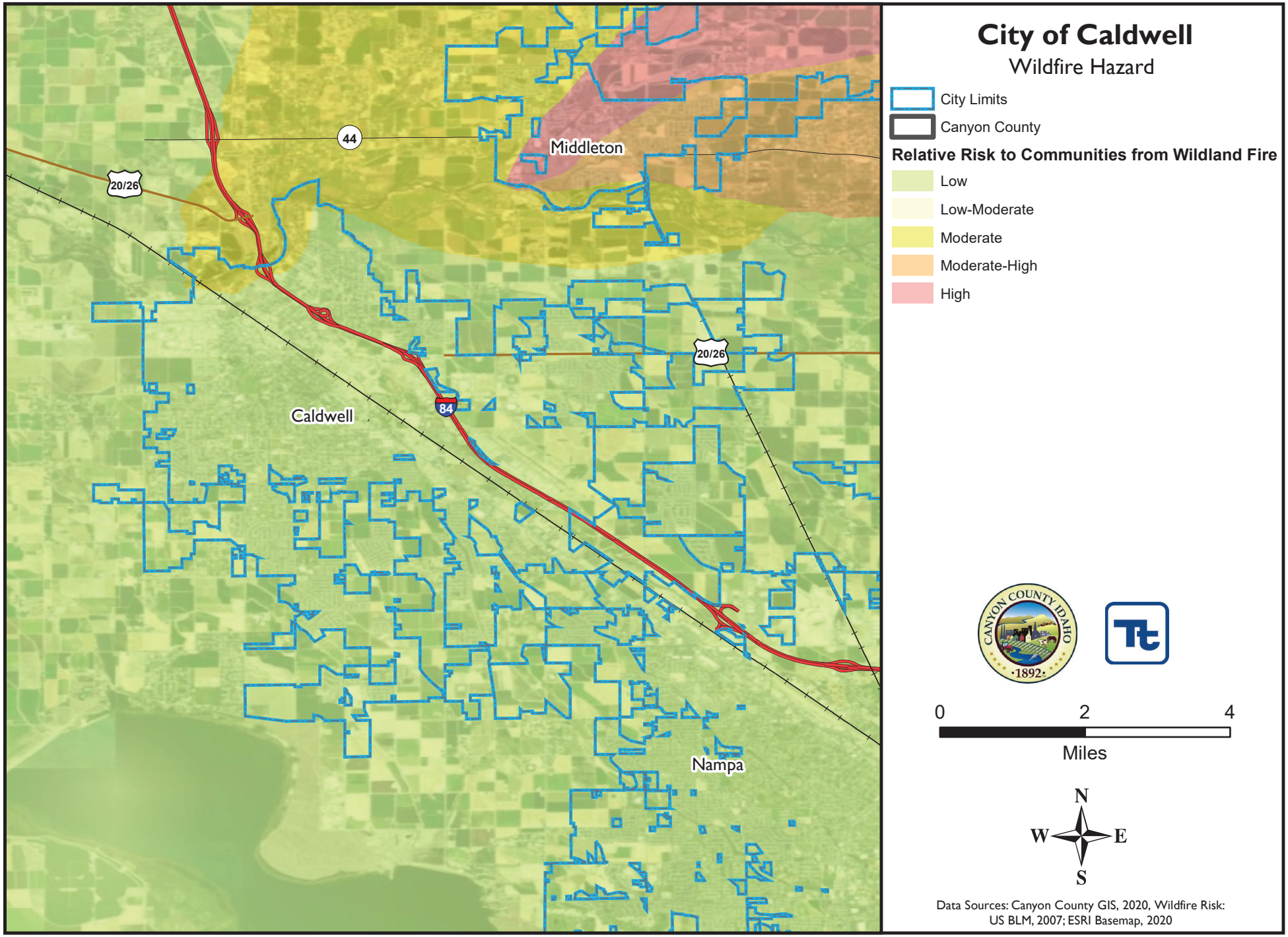
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Landslide Susceptibility: USGS, 2020; ESRI Basemap, 2020


City of Caldwell
Wildfire Hazard
City Limits
Canyon County
Relative Risk to Communities from Wildland Fire
Low
Low-Moderate
Moderate
Moderate-High
High
Middleton
Caldwell
Nampa
44
20/26
20/26
84
CANYON COUNTY IDAHO
1892
0
2
4
Miles
N
W
E
S
Data Sources: Canyon County GIS, 2020, Wildfire Risk: US BLM, 2007; ESRI Basemap, 2020

3. CITY OF GREENLEAF

The City of Greenleaf did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

4. CITY OF MELBA

The City of Melba did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

5. CITY OF MIDDLETON

The City of Middleton did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

6. CITY OF NAMPA

6.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
Kirk Carpenter, Chief of Nampa Fire Dept. (Acting Emergency Manager)
9 12th Avenue
Nampa, Idaho 83651
Telephone: 208-250-3258
e-mail Address: carpenterk@cityofnampa.us

Alternate Point of Contact
Jeff Barnes, Deputy Public Works Director (Transportation)
500 12th Avenue South
Nampa, Idaho 83651
Telephone: 208-468-5521
e-mail Address: Barnesj@cityofnampa.us

This plan was developed in cooperation with the following City Departments: Emergency Management Team, Public Works, Planning and Zoning, Building and Facilities, and the Nampa Fire Department with final review from the executive office of the City and Canyon County. Public input and integration are scheduled to take place under the Canyon Counties completion process. The development of this annex was carried out by the members of the local mitigation planning team, whose members are listed in Table 6-1.

Table 6-1. Local Mitigation Planning Team Members

Name	Title
Jeff Barnes	Deputy Public Works Director (Transportation)
Daniel Badger	City Engineer
Kirk Carpenter	Fire Chief / Emergency Manager
Kristen Pudlow	Emergency Support Specialist
Ashlee Teeter	Administrative Assistant (Dept. PW, Transportation)

6.2 JURISDICTION PROFILE

6.2.1 Location

The City of Nampa is located in the beautiful Treasure Valley in Southwest Idaho. It is the most populous city in Canyon County. The Area of City Impact comprises 48,851 acres and is bordered by the Boise River, the City of Caldwell, the City of Meridian, Lake Lowell, and agricultural land to the south. The city limits are comprised of 21,576 acres.

The current boundaries generally extend from the Northside of Lake Lowell on Midway Road (encompassing Midway Sports Park) extending north to East Homedale Road to Middleton Road, then extending east on Laster Lane to Midland Blvd up to the City of Caldwell Impact Area below Linden Road over to Madison Road out past

Joplin Road up to the City of Middleton Impact Area along the river. From there the boundary extends east to North Can Ada Road (the Ada County Line) extending south to Ustick Road East until North McDermott Road. From McDermott Road the boundary extends south until Dye Lane extending west to Lake Shore Drive to the west of 12th Ave Rd extending north around Lake Lowell to Midland Blvd until Greenhurst Road extends west to Midway Road, encompassing an area of 31.6 square miles.

6.2.2 History

The City of Nampa was incorporated on April 17, 1891. In 1883, the landscape of what was to become Canyon County was changed forever, when the Oregon Short Line Railway (a subsidiary of the Union Pacific) made its way from Granger, Wyoming to Huntington, Oregon. The sagebrush-covered ground was cleared and leveled so tracks could be laid, providing an opportunity for safer travel to the emigrants of the east. Towns spring up about every 10 to 15 miles along the tracks. Nampa is one such town.

6.2.3 Climate

The climate of the City of Nampa is a high desert location bordered to the north by the Front Range of the Rocky Mountains and to the South by the Owyhee Mountains. Nampa enjoys a mild climate year-round and on average enjoys 210 sunny days per year.

6.2.4 Governing Body Format

The City of Nampa has a Mayor and City Council as their governing body with six City Council Members to act as the legislative body and the Mayor to provide the role of the executive branch for the City. The City of Nampa has twelve departments: Police, Fire, Public Works, Building, Planning and Zoning, Parks and Recreation, Economic Development, Public Library, City Clerk's Office, Human Resources, Information Technology, and Finance.

The City of Nampa assumes responsibility for the adoption of this plan; the Emergency Management Team will oversee its implementation.

6.3 CURRENT TRENDS

6.3.1 Population

According to COMPASS, the population of the City of Nampa as of April 2020 was 106,860. Since 2010, the population has grown at an average annual rate of 2.7 percent. The growth rate in Nampa was projected to be 3.7% in 2019. The Treasure Valley, where the City of Nampa is located, has been experiencing rapid growth for several years and according to COMPASS is projected to grow to a population of 131,406 by the year 2030.

6.3.2 Development

The City of Nampa's development growth rate for building permits from 2015 to 2019 was 15.8% with the largest increase being in Single Family homes followed by Commercial and Mixed-use Development with the lowest growth being seen in Multi-family homes. 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? • **If yes, give the estimated area annexed and estimated number of parcels or structures.**	Yes 1,470 parcels/865.9 acres
Is your jurisdiction expected to annex any areas during the performance period of this plan? • **If yes, describe land areas and dominant uses.** • **If yes, who currently has permitting authority over these areas?**	Yes, there is an application to annex a 365 acre parcel for industrial use for next year. This is in addition to the typical applications expected throughout the period. 656 Acres/ Residential Canyon County/City of Nampa
Are any areas targeted for development or major redevelopment in the next five years? • **If yes, briefly describe, including whether any of the areas are in known hazard risk areas**	Yes The City of Nampa does have a designated Opportunity Zone identified in North Nampa where tax incentives are provided for investors. This identified zone does have two identified floodplain areas within it, the floodplains would be the area around Indian Creek and Mason Creek. These are narrow floodplains that do not impact large amounts of the opportunity development zone and can be buildable with appropriate engineering. This area also falls within the Class 5 Liquefaction area in the City of Nampa.
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	

	2015	2016	2017	2018	2019
Single-Family	416	271	540	809	1056
Multi-Family	12	28	31	12	41
Other (commercial, mixed-use, etc.)	701	601	649	819	924
Total	1129	900	1220	1640	2021

Provide the number of new construction permits for each hazard area or provide a qualitative description of where development has occurred.	• Special Flood Hazard Areas: 2, Mason Creek and Indian Creek • Landslide: None • High Liquefaction Areas: 2, the Majority of Nampa falls under a Class 3 (Underlain by materials that generally do not contain cohesionless sediments) with a smaller portion falling within a Class 5 Liquefaction (annual saturation, underlain likely contains some cohesionless sediments) area under the Indian Creek Flood Zone. • Tsunami Inundation Area: None • Wildfire Risk Areas: None
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 of Nampa continues to grow, transforming from open space to agricultural and urbanized land-use. With large portions of agriculture land residing outside of the City limits but within the impact zones. As the population increases so do commercial development with a rise in building construction on Caldwell Blvd, 12th Ave Rd, Garrity Blvd, Idaho Center Blvd, Karcher Road, N. Midland Blvd, and Franklin Road.

6.4 CAPABILITY ASSESSMENT

The City of Nampa performed an assessment of its 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. This section summarizes the following findings of the assessment:

- An assessment of legal 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 the National Flood Insurance Program (NFIP) compliance is presented in Table 6-8.
- Classifications under various community mitigation programs are presented in Table 6-9.

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 and are identified as community capacity building mitigation actions in the analysis of mitigation actions in this annex.

Table 6-3. Legal and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	Yes	Yes	No
Comment: *Nampa City Code Title 4, Chapter 2; Adopted 12/4/2017; Ord, #4353 / ID State Code Title 44, Chapter 22*				
Zoning Code	Yes	Yes	No	Yes
Comment: *Nampa City Code Title 10, Chapter 3; Adopted 9/19/2016; Ord, #4281 / ID State Code Title 31 Chapter 38 Zoning Reg. 1996*				
Subdivisions	Yes	No	No	No
Comment: *Nampa City Code Title 10, Chapter 27; Adopted 5/1/2006 / ID State Code Title 50, Chapter 13*				
Stormwater Management	Yes	Yes	No	No
Comment: *Nampa City Code Title 8, Chapter 4; Adopted 3/7/2005; Ord, #3431/ City of Nampa ENGR Development Process & Policy 2017*				
Post-Disaster Recovery	Yes	No	Yes	Yes
Comment: *City of Nampa Emergency Operations Plan Version 1.2, Sec. 6; 2/11/2020;*				
Real Estate Disclosure	No	No	No	No
Comment:				
Growth Management	Yes	No	No	No
Comment: *Nampa 2040 Comprehensive Plan; Adopted 3/2/2020*				
Site Plan Review	Yes	No	No	No
Comment: *City of Nampa Code Title 10; Conceptual Plan Review—Nampa Building Department*				
Environmental Protection	Yes	Yes	Yes	No
Comment: *City of Nampa Sanitary Sewer Overflow Response Plan; 1/29/2020* *Catastrophic Power Failure Lift Station Response Plan 2019* *Idaho State Code Title 39, Chapter 1, Environmental Quality*				
Flood Damage Prevention	Yes	No	No	No
Comment: *Nampa City Code Title 4, Chapter 9; Adopted 4/18/2011; Ord, #3964*				
Emergency Management	Yes	Yes	No	Yes
Comment: *City of Nampa Emergency Operations Plan Version 1.2, Sec. 6; 2/11/2020* *Nampa Ready—Emergency response efforts—Serves as a long-term community-facing communication system* *Canyon County ESF2 Communications; Canyon County Emergency Operations Plan 8/24/2015*				
Climate Change	No	No	No	No
Comment:				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Planning Documents				
Comprehensive plan	Yes	No	No	No
Comment: *Nampa 2040 Comprehensive Plan; Adopted 3/2/2020*				
Capital Improvement Plan	Yes	No	No	No
How often is the plan updated? *Annually*				
Comment: *City of Nampa Annual CIP, Multiple departments*				
Disaster Debris Management Plan	No	No	No	Yes
Comment:				
Floodplain or Watershed Plan	Yes	No	No	No
Comment: *National Flood Insurance Program*				
Stormwater Plan	Yes	No	Yes	No
Comment: *Federal Clean Water Act 33 U.S.C. 1251 et seq. (1972), NPDES Stormwater Permit*				
Urban Water Management Plan	No	No	No	No
Comment:				
Habitat Conservation Plan	No	No	No	No
Comment:				
Economic Development Plan	Yes	No	No	No
Comment: *Nampa Economic Development Plan; Created in 2017*				
Shoreline Management Plan	No	No	No	No
Comment:				
Community Wildfire Protection Plan	No	No	No	Yes
Comment:				
Forest Management Plan	No	No	No	No
Comment:				
Climate Action Plan	No	No	No	No
Comment:				
Comprehensive Emergency Management Plan	Yes	No	No	No
Comment: *City of Nampa Emergency Operations Plan Version 1.2, Sec. 6; 2/11/2020*				
Threat & Hazard Identification & Risk Assessment	No	Yes	No	Yes
Comment: *Idaho All Hazard Mitigation Plan*				
Post-Disaster Recovery Plan	No	No	No	No
Comment:				
Continuity of Operations Plan	Yes	No	No	No
Comment: *City of Nampa Emergency Operations Plan Version 1.2, Sec. 6; 2/11/2020*				
Public Health Plan	Yes	Yes	No	Yes
Comment: *Southwest Idaho Healthcare Coalition. Works with many local agencies for response efforts*				

Table 6-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? • **If no, who does? If yes, which department?**	Yes Building Department
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	Yes

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	Yes (Water, Sewer)
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	Yes (local improvement districts)
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other: Permits	Yes

Table 6-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Engineering/City of Nampa/City Engineer Planning and Zoning/City of Nampa/Planning Director
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering/City of Nampa/City Engineer
Planners or engineers with an understanding of natural hazards	Yes	Engineering/City of Nampa/City Engineer Planning and Zoning/City of Nampa/Planning Director
Staff with training in benefit/cost analysis	Yes	Engineering/City of Nampa/City Engineer
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Engineering/City of Nampa/City Engineer
Scientist familiar with natural hazards in the local area	No	
Emergency manager	Yes	Fire Department/City of Nampa/Fire Chief
Grant writers	No	

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? • If yes, briefly describe.	Yes Code Compliance and Community Relations has a Complaint Priority System that involves health and safety complaints involving hazardous conditions, matters of urgent public fire, heath, and life safety
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	No It could be used for education and outreach to the public for this matter

Criterion	Response
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • **If yes, briefly describe.**	Yes Building and Site Design Standards Committee Nampa Planning and Zoning Commission Building Fire Code Advisory and Appeals Board
Do you have any other programs already in place that could be used to communicate hazard-related information? • **If yes, briefly describe.**	Yes Nextdoor Communication Updates, City of Nampa Facebook Page, Press Releases, City's Instagram
Do you have any established warning systems for hazard events? • **If yes, briefly describe.**	Yes Nampa Alert Sense through Nampa PD

Table 6-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Engineering Division
Who is your floodplain administrator? (department/position)	Engineering Division/City Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	4-18-2011
Does your floodplain management program meet or exceed minimum requirements? • **If exceeds, in what ways?**	Meets
When was the most recent Community Assistance Visit or Community Assistance Contact?	2018
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • **If so, state what they are.**	No
Are any RiskMAP projects currently underway in your jurisdiction? • **If so, state what they are.**	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • **If no, state why.**	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? • **If so, what type of assistance/training is needed?**	Yes Training
Does your jurisdiction participate in the Community Rating System (CRS)? • **If yes, is your jurisdiction interested in improving its CRS Classification?** • **If no, is your jurisdiction interested in joining the CRS program?**	No No No
How many flood insurance policies are in force in your jurisdiction?[a] • **What is the insurance in force?** • **What is the premium in force?**	189 $48,600,600 $174,979
How many total loss claims have been filed in your jurisdiction?[a] • **How many claims are still open or were closed without payment?** • **What were the total payments for losses?**	0 0 0

a. According to FEMA statistics as of May 2020

Table 6-9. Community Classifications

	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	99	2010
Public Protection	Yes	2	N/A
Storm Ready	Yes	Participating	N/A
Firewise	No	N/A	N/A

6.5 INTEGRATION WITH OTHER PLANNING INITIATIVES

The goal of plan integration is to ensure that potential hazard impacts are considered in plans for future development. The City will incorporate goals for risk reduction and safety into policies and plans and use risk assessment to inform plans and policies into actions (e.g., future land-use planning, emergency operations plans, improvement mitigation actions under mechanisms such as the capital improvement plan and recovery planning).

6.5.1 Existing Integration

The following plans or ordinances already address potential impacts or include specific projects that should be included as action items in the mitigation action plan:

- **City of Nampa Building Codes—***Nampa City Code Title 4, Chapter 2; Adopted 12/4/2017; Ord, #4353 / ID State Code Title 44, Chapter 22***,** active adherence and enforcement of the adopted building codes help protect the community and residents from potential hazards and mitigate some of the risks for citizens in those hazards such as flooding and fire.
- **City of Nampa Zoning Codes—***Nampa City Code Title 10, Chapter 3; Adopted 9/19/2016; Ord, #4281,* adoption and adherence to the City's zoning codes helps to address and reduce potential risks to citizens and businesses within the city limits for hazards.
- **Post-Disaster Recover**—the City of Nampa Emergency Operations Plan addresses some of the actions for operations during post-disaster recovery during an emergency.
- **Environmental Protection—**the City of Nampa's Sanitary Sewer Overflow Response Plan, 1/29/2020, Catastrophic Power Failure Lift Station Response Plan, 2019 assist, and support with the mitigation and actions of the City to reduce the impacts of those types of hazards upon community members.

6.5.2 Opportunities for Future Integration

The City of Nampa has the opportunity to pursue hazard mitigation integration into the following areas:

- Zoning Code Integration, as our City Zoning codes are reviewed or updated we will look to find opportunities for Hazard mitigation into those updates and amendments.
- Post-disaster Recovery, as the City works to refine its Emergency Operations Policy, we will seek opportunities to incorporate increased post-disaster recovery mitigation as needed.
- Emergency Management, as the City works to improve and adapt our emergency management process, opportunities for integration of increased hazard mitigation strategies will be incorporated.
- Community Wildfire Protection Plan, over the next five years as the City updates its emergency management and hazard mitigation, we will seek to incorporate a Community Wildfire Protection Plan.

- Threat and Hazard Identification and Risk Assessment, during the next five years as the emergency management process for the City is refined the City will work to create and incorporate a Threat and Hazard Identification and Risk Assessment.
- Public Health Plan, the city currently has multiple efforts as it relates to Public Health initiatives to include the Health Impact Coalition for the City that is working on a Strategic Plan. Upon being finalized this can be incorporated into the City's emergency management considerations.

6.6 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 6-10 lists past occurrences of natural hazards that affected the City of Nampa. Other hazard events that broadly affected the entire planning area, including the City of Nampa, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 6-10. Past Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Damage Assessment
COVID-19 Pandemic	DR-4534-ID (COVID-19)	3/14/2020 – Present	Not Available
Flooding (Irrigation Main Break)	NA	09/15/2018	Not Available
Main Water Line Break	NA	06/1/2018	Not Available
Severe Winter Weather, Snow Accumulation	NA	01/10/2017	Not Available
Sanitary Sewer Leak	NA	01/19/2017	Not Available

6.7 HAZARD RISK RANKING

Table 6-11 presents a local ranking for the City of Nampa of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 6-11. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Earthquake[a]	32	High
2	Severe Weather	27	Medium
3	Critical Infrastructure Failure[c]	20	Medium
4	Flooding[b]	18	Medium
5	Dam Failure	6	Low
5	Drought	6	Low
6	Wildfire	0	None

a. Based on the Cottonwood Mountain M7.0 Earthquake Scenario, and the Squaw Creek M7.0 Earthquake Scenario
b. Based on the 100 years or 1 percent annual chance hazard results utilized for risk ranking, and the Emergency Declaration in the City of Nampa from 2017.
c. Based on the city's aging water infrastructure both Domestic and Irrigation that has been causing expensive failures and emergency repairs over the last few years, see Emergency declarations from June 2018, September 2018, and January 2017.

6.8 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 the jurisdiction.

6.8.1 Repetitive Loss Properties

There are no FEMA Identified Repetitive Loss Properties located in Canyon County.

6.8.2 Other Noted Vulnerabilities

The following issues have been identified based on a review of the results of the risk assessment, and other available resources:

- Earthquakes: 100% of the population in Nampa lives within the Earthquake hazard area for both the Squaw Creek M7.0 Earthquake and the Cottonwood Mountain M7.0 Earthquake. Additionally, most homeowners and renters insurance does not cover earthquake damage and the estimated value of the damaged structures alone in these types of events in the city is $29,766,978 or about 2% of the total value in all structures within city limits.
- Critical Infrastructure Failure: The City has limited resources to maintain infrastructure or in the case of Fire building of needed critical incrusted, each year maintenance or construction is deferred due to lack of funding. This inability to keep up with asset maintenance leads to pipes and other infrastructure failures causing hazards to residents and expensive emergency repairs. Three out of the five emergency declarations within the past five years have been to address critical infrastructure repairs. In the case of the Fire Department, response times are delayed for residents within the are furthest from our existing fire stations, leading to an increased risk to people and infrastructure located within that area. Some of the main areas at risk for infrastructure failure are:
  - Water System Infrastructure Deferred Maintenance: with a total of 549 miles of pipe, 17 wells, 2 water tanks, the annual maintenance goal is 5 miles per year with an estimated cost of $5.8 million annually the city is only able to maintain 1 mile per year currently for a cost of $1,161,608. The deferred maintained of 4 miles per year at an estimated cost of $4,638,400 it continues to leave the city at risk for future water system infrastructure emergencies.
  - Pressure Irrigation System Infrastructure Deferred Maintenance: with a total of 474 miles of pipe, 100 pump stations, the annual maintenance goal is 5 miles per year at an estimated cost of $5.28 Million annually. The city's actual maintenance has been 1 mile per year at a cost of $1,056,000 annually. This ends in a deferred maintenance of 4 miles per year of pressure irrigation at an estimated cost of $4,056,800, past failures have caused expensive emergency repairs for those further exacerbating budgetary constraints.
  - Wastewater Infrastructure Deferred Maintenance: with a total of 398 miles of pipe and 13 lift stations, the city has an annual maintenance goal of 5 miles per year at a cost of $5.06 Million. The current rate of maintenance has been 1 mile per year at a cost of $1,003,200. This leaves a deferred maintenance of 4 miles per year and at an estimated cost of $4,056,800 added to another year's budget.
  - Streets/Bridges and Culverts: with 316 bridges and culvers, and 187 miles of storm drain, the estimated cost of maintenance needed per year is $1.5 Million. Currently, the city can allocate $450,000 annually, leading to an estimated deferred cost of $1,050,000 in bridge and culvert maintenance. In August of 2017, a culvert failure on Midway road just outside city limits failed due to deferred maintenance, causing flood damage to homes within the area. While this was outside city

limits, the City has similar aging culverts along the same road and in other areas within the city, leaving an increased risk for the city and residents for this type of hazard to occur.

- Fire Response Limitations: The city's recent growth rate of 25% since 2007, has led to an increase in calls for a response from the Fire Department by 40% during that time. Due to a lack of funding the area hit hardest with the increase in demand is the area of Southwest Nampa. The Nampa Fire department has been requesting funding for a 6th Fire Station but has been unsuccessful due to lack of funding. Due to this, citizens in Southwest Nampa face the longest response times at an average of 6 minutes and 43 seconds, as fire crews from two different stations work to cover those calls. According to current projections, funds for this Fire station are not projected to be available in the next few years leaving residents in those areas at an increased risk of life and property loss during a structural fire.
- Emergency Response and Mitigation Infrastructure Issues: the City of Nampa has not had an Emergency Manager or an Emergency Management team. This has caused the citizens and infrastructure to be left more vulnerable to hazards as our response efforts have not been focused until recently due to the current emergency. The city is currently facing a deficit in Emergency Management training and administrative efforts, assessing critical needs and equipment, and infrastructure. This leaves the city with a lack of understanding in its ability to protect its Community Lifeline efforts through all phases of emergency's as they occur. A Result of this has also left Emergency and First Responders such as Police and Fire with a lack of support or focus on Emergency Mitigation and response efforts through funding for specialty services and response capabilities training and equipment.

- Flooding: 2% of the City of Nampa residents are within the risk area of the Blacks Creek Dam Failure hazard. While that is not a large portion of the population that lives within the 105 acres the estimated structural damage for such an event is $3,537,127.
- Flooding: 2.5% of the City of Nampa residents are estimated to be at risk for exposure to the 100-year flood hazard. The total estimated structural damage in such an event impacted structures within the city is $18,300,197. According to a 2019 Survey conducted by Canyon County out of 475 respondents, 81% did not have flood insurance and 11% were not sure indicating a chance that they also do not have flood insurance.
- Landslides: The estimated percent of residents living within areas exposed to the risk of landslides at a 15% to 30% slope is 1% of the population. While the percent is low the estimated value in structural damage in such an event is $4,700,228. Keeping in mind that there is a high likely hood of having multiple emergencies happen at the same time, for example, if a severe storm causes increased rainfall and or flooding this increases the risks of landslides leaving the potential for multiple emergency response efforts at the same time.

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

6.9 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 6-12 lists the actions that make up the City of Nampa hazard mitigation action plan. Table 6-13 identifies the priority for each action. Table 6-14 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 6-12. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #NA1—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.							
Existing	Flooding	4	Public Works	Emergency Management	High	HMGP, PDM, FMA	Short-term
Action #NA2—Integrate the hazard mitigation plan into other plans, ordinances, and programs that dictate land-use decisions in the community, including areas identified as floodplains.							
New and Existing	flooding	4	Planning and Zoning	Emergency Management	Low	Staff Time, General Funds	Ongoing
Action #NA3—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	1, 2, 3, 4	Emergency Management	Nampa Fire Dept.	Low	Staff Time, General Funds	Short-term
Action #NA4—Continue to maintain good standing and compliance under the NFIP through the 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.							
New and Existing	flooding, severe weather	2, 4	Public Works	Emergency Management	Low	Staff Time, General Funds	Ongoing
Action #NA5—Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following increased water re-use strategies and practices.							
New and Existing	Drought	6	Waterworks	Public Works	Low	Staff Time, General Funds	Short-term
Action #NA6—Develop a post-disaster recovery plan and a debris management plan.							
Existing	earthquake, flooding, landslide, severe weather,	1, 2, 4	Emergency Management	Public Works	Low	Staff Time, General Funds	Short-Term
Action #NA7— Increase citizen awareness of Earthquake risk in this area with the goal of increasing the number of residents with Earthquake insurance.							
Existing	Earthquake	1	Emergency Management	Public Information Officer	Low	Staff Time, General Funds	Ongoing
Action #NA8— Continue to conduct Bridge Assessment for susceptible vulnerabilities and plan for corrective actions as needed.							
Existing	Earthquake	1	Public Works	Emergency Management	High	HMGP, BRIC, FMA, General Funds	Ongoing
Action #NA9— Plan for and maintain adequate road and debris clearing capabilities through active maintenance and education on city snow removal plan.							
Existing	Severe Weather	2	Streets	Public Works	Low	Staff Time, General Funds	Short-Term and Ongoing

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #NA10 Work to support and produce severe weather emergency preparedness information for public awareness such as fuel-burning equipment should be used outside as well as information and resources available to help households be prepared.							
Existing	Severe Weather	2	Emergency Management	Public Information Officer	Low	Staff Time, General Funds	Ongoing
Action #NA11— Work to establishing heating centers in the case of a severe power outage during extreme cold in buildings such as the library.							
New and Existing	Severe Weather	2	Emergency Management	Building and Facilities	High	HMGP, BRIC, FMA, General Funds	Ongoing
Action #NA12— Work to increase the level of training and response of Emergency Management personnel on areas of identified weaknesses such as but not limited to earthquakes, floods, critical infrastructure failure, and severe weather.							
New and Existing	earthquake, flooding, landslide, severe weather	1, 2, 3, 4	Emergency Management	Nampa Fire Dept.	Low	Staff Time, General Funds, HMGP, BRIC, FMA	Ongoing
Action #NA13—Complete a stormwater drainage study for problem areas and prepare and adopt a community stormwater management master plan.							
Existing	Flooding, Severe Weather	2, 4	Public Works	Emergency Management	Low	Staff Time, General Funds	Short-term
Action #NA14— Work to use and maintain GIS to identify areas at risk of flooding.							
Existing	Flooding	4	Engineering	Public Works	Low	Staff Time, General Funds	Short-term
Action #NA15— Establish a funding plan for approval processes to fund water infrastructure upgrades through existing funding considerations or other available means to reduce the interruption to critical services to Nampa residents and to mitigate the vulnerability of aging underground water infrastructure from hazards such as earthquakes.							
Existing	Critical Infrastructure Failure, Flooding, Earthquakes	1, 2, 4	Waterworks	Public Works	Low	Staff Time, General Funds, HMGP, BRIC, FMA	Ongoing
Action #NA16— Establish a critical needs assessment of culverts and bridges most at risk for failure and work to develop a funding plan for approval processes for critical culvert and bridge upgrades to reduce the risk of failure during hazards including but not limited to severe weather.							
New and Existing	Critical Infrastructure, Flooding, Server Weather	2, 3, 4	Public Works	Emergency Management	High	Staff Time, General Funds, HMGP, BRIC, FMA	Ongoing
Action #NA17—Work to increase emergency preparedness of the City departments and the community through active participation and engagement in education and training with public, private, and non-profit entities.							
Existing and New	Earthquakes, Severe Weather, Critical Infrastructure Failure, Flooding.	1, 2, 3, 4	Emergency Management	Mayor's Office	Medium	Staff Time, General Funds, HMGP, BRIC, FMA	Ongoing

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #NA18—Work to assess emergency response capabilities and weaknesses to work to fund training and equipment needed to strengthen the protection of our citizens and infrastructure and mitigate those weaknesses, including active innovation through including and participation with multiple partners and the community.							
Existing and New	Earthquakes, Severe Weather, Critical Infrastructure Failure, Flooding.	1, 2, 3, 4	Emergency Management	Mayor's Office	Medium	HMGP, BRIC, FMA, Staff Time.	Ongoing
Action #NA19—Work to develop mitigation and funding strategies to protect life and infrastructure buildings and properties located in Southwest Nampa outside of normal range of existing the fire stations as well as education efforts for citizens on fire mitigation strategies both inside and outside of the home.							
Existing and New	Critical Infrastructure Failure	2	Nampa Fire Department	Emergency Management	High	Staff Time, General Funds, HMGP, BRIC, FMA	Ongoing

Table 6-13. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]
NA1	1	Low	High	No	No	No	Low	Medium
NA2	1	High	Low	Yes	Yes	Yes	High	Low
NA3	4	Medium	Low	Yes	No	Yes	High	Low
NA4	2	High	Low	Yes	No	Yes	High	Low
NA5	1	High	High	Yes	Yes	Yes	High	Low
NA6	3	High	Low	Yes	Yes	Yes	Medium	Low
NA7	1	High	Low	Yes	Yes	Yes	High	Low
NA8	1	High	High	Yes	Yes	No	Medium	Medium
NA9	1	High	Medium	Yes	Yes	Yes	High	Medium
NA10	1	High	Low	Yes	Yes	Yes	High	Low
NA11	1	High	High	Yes	Yes	No	High	High
NA12	4	High	Low	Yes	Yes	Yes	High	Low
NA13	2	High	Low	Yes	Yes	Yes	High	Low
NA14	1	Medium	Low	Yes	Yes	Yes	Medium	Low
NA15	3	High	High	Yes	Yes	No	High	High
NA16	3	High	High	Yes	Yes	No	High	High
NA17	4	High	Medium	Yes	Yes	Yes	High	Medium
NA18	4	High	High	Yes	Yes	No	High	High
NA19	1	High	High	Yes	Yes	No	High	High

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

Table 6-14. Analysis of Mitigation Actions

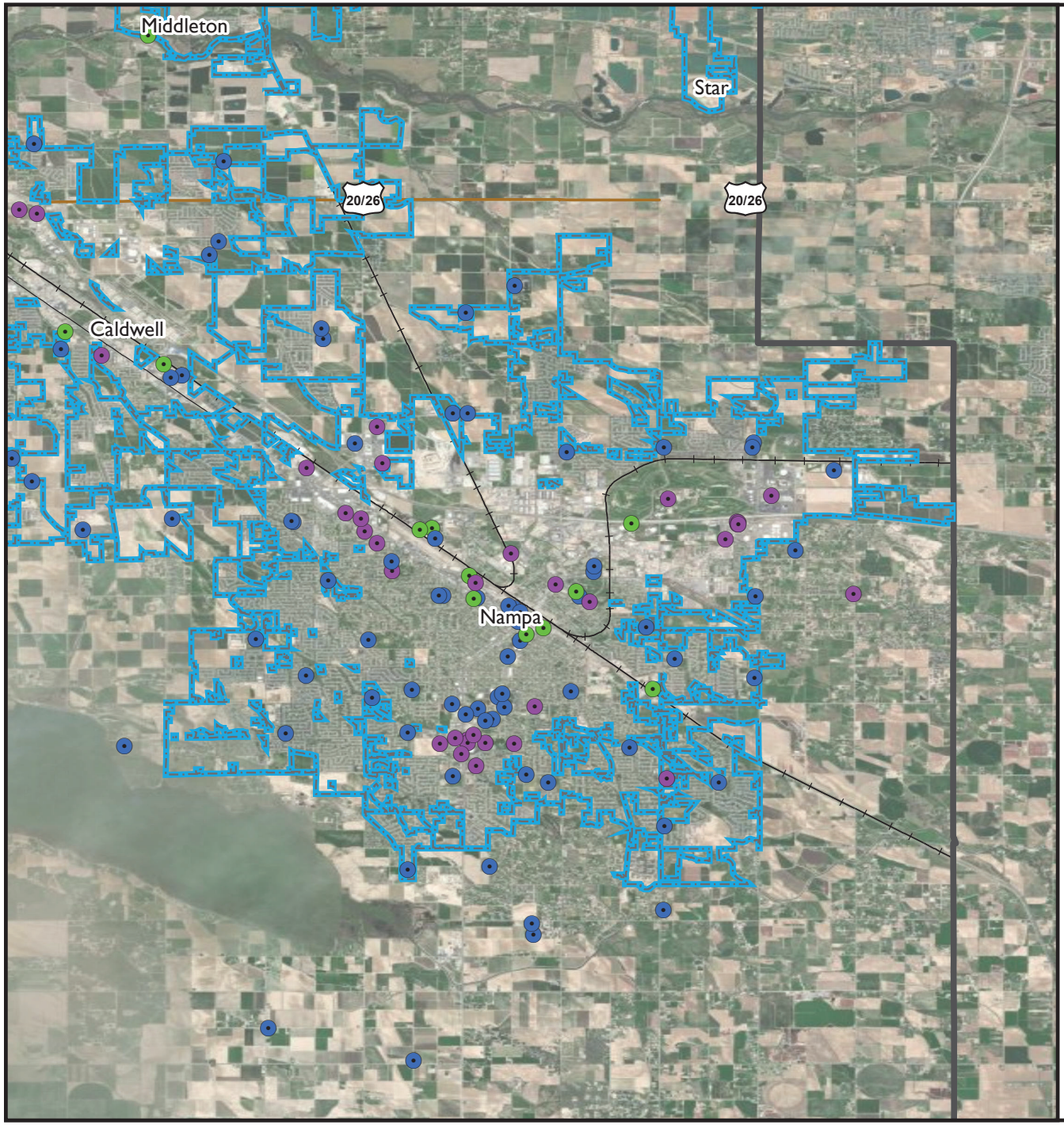
Hazard Type	Action Addressing Hazard, by Mitigation Type[a]						
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Community Capacity Building
Earthquake		NA7	NA7, NA18	NA6, NA15	NA3, NA12, NA17, NA18	NA8, NA15	NA3, NA12, NA17, NA18
Server Weather	NA16, NA13, NA4	NA16, NA9, NA13, NA6, NA4	NA10, NA17, NA4	NA13, NA16	NA6, NA9, NA11, NA12, NA17, NA18	NA13, NA16, NA18	NA3, NA10, NA11, NA12, NA17, NA18
Critical Infrastructure Failure	NA3, NA15, NA16, NA18, NA19	NA15, NA16, NA18, NA19	NA17, NA18, NA19	NA15, NA16	NA17, NA18, NA19	NA15, NA16, NA19	NA15, NA16, NA17, NA18, NA19
Flooding	NA1, NA2, NA4, NA12, NA13, NA15, NA16, NA18	NA1, NA2, NA4, NA6, NA13, NA15, NA16, NA18	NA1, NA4, NA13, NA14, NA17, NA18	NA13, NA15, NA16	NA6, NA12, NA14, NA17, NA18	NA1, NA6, NA15, NA16	NA2, NA4, NA6, NA12, NA13, NA16, NA17, NA18

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

6.10 REVIEW AND INCORPORATION OF INFORMATION FOR THIS ANNEX

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

- **City of Nampa Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **City of Nampa Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- **City of Nampa Sanitary Sewer Overflow Response Plan-** This plan was reviewed to ensure incorporation and considerations were given when completing our hazard mitigation strategies.
- **City of Nampa Sanitary Catastrophic Power Failure Lift Station Response Plan-** This plan was reviewed to ensure incorporation and considerations were given when completing our hazard mitigation strategies.
- **City of Nampa Emergency Operations Plan-** This plan was reviewed to ensure incorporation and considerations were given when completing our hazard mitigation strategies.
- **The State of Idaho All Hazard Mitigation Plan-** This plan was reviewed to ensure incorporation and considerations were given when completing our hazard mitigation strategies.
- **Canyon County All Hazard Mitigation Plan-** This plan was reviewed to ensure incorporation and considerations were given when completing our hazard mitigation strategies.
- **Technical Reports and Information—**The following **o**utside resources and references were reviewed:
  - **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking, and action development.



City of Nampa

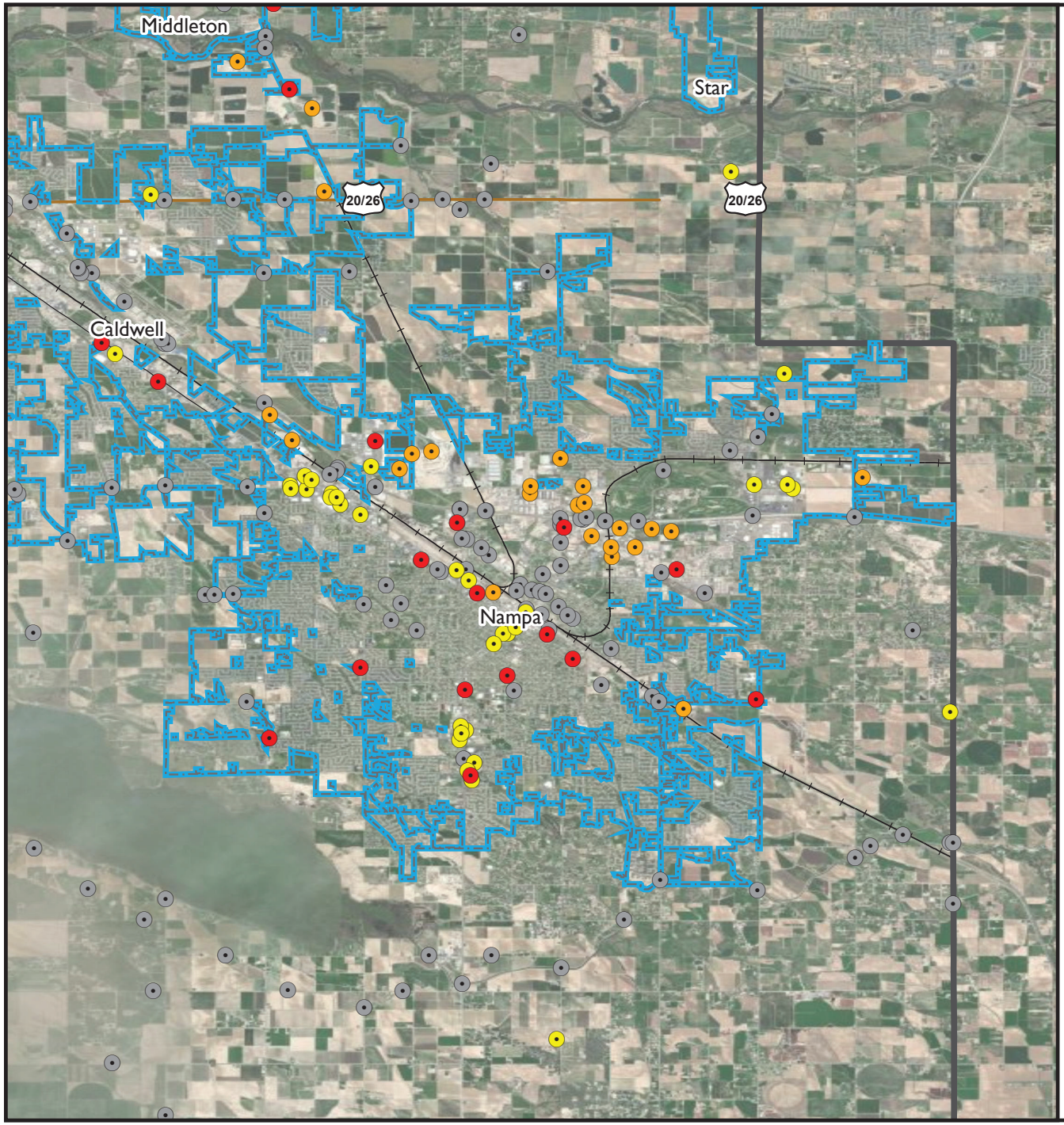
Critical Facilities (1 of 2)

- Food, Water, Shelter
- Health and Medical
- Safety and Security
- City Limits
- Canyon County

0 1.75 3.5 Miles

N
W E
S

Data Sources: Boundaries & Facilities: Canyon County GIS, 2020; HIFLD, 2020; Hazus v4.2 SP03; Basemap: ESRI, 2020



City of Nampa

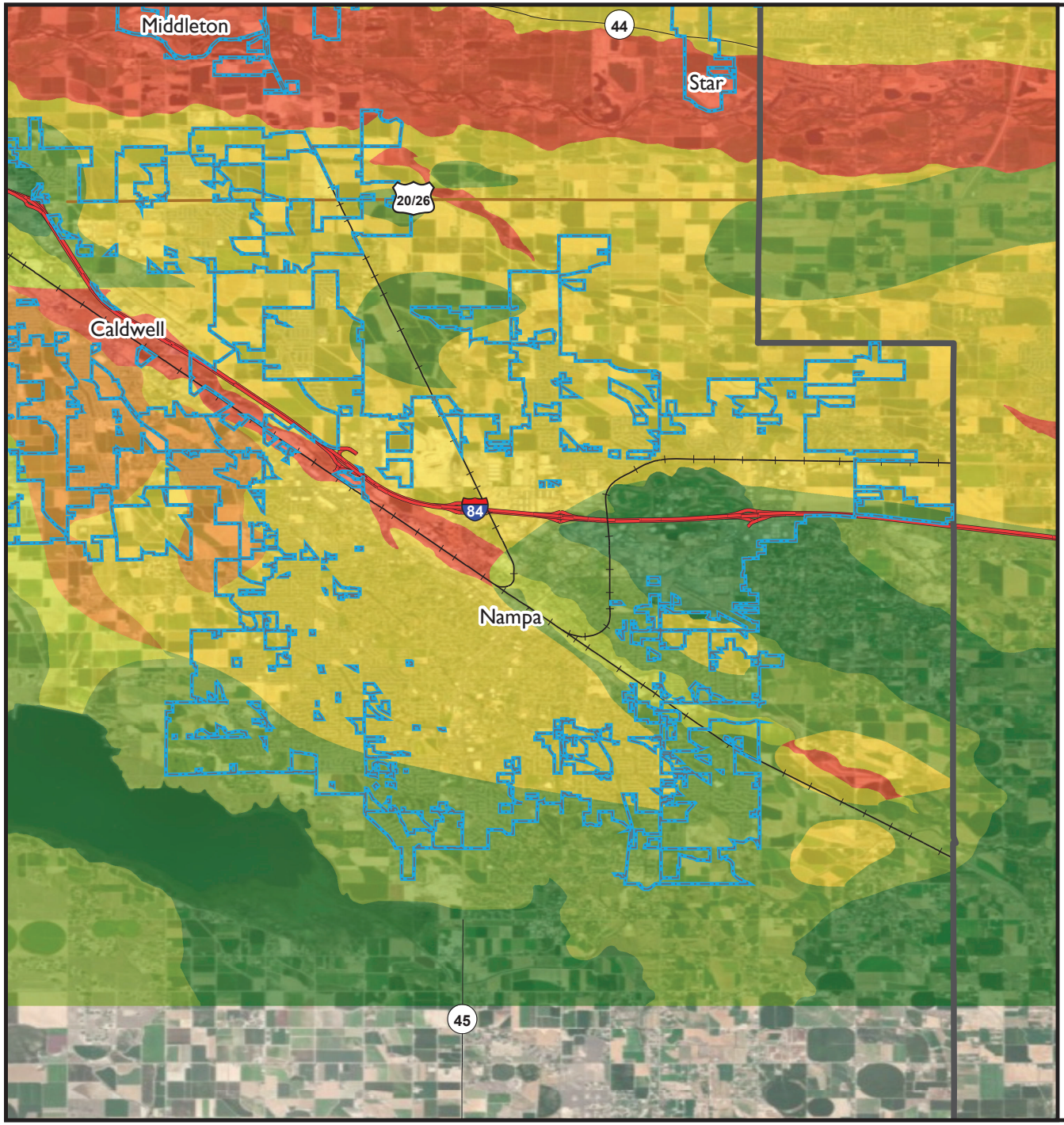
Critical Facilities (2 of 2)

- Communications
- Energy
- Hazardous Material
- Transportation
- City Limits
- Canyon County

0 1.75 3.5 Miles

N
W E
S

Data Sources: Boundaries & Facilities: Canyon County GIS, 2020; ITD 2020; EPA 2020; HIFLD, 2020; Hazus v4.2 SP03; Basemap: ESRI, 2020



City of Nampa

Liquefaction Susceptibility

City Limits

Canyon County

Liquefaction Susceptibility Class

- 0 (least susceptible)
- 1
- 2
- 3
- 4
- 5 (most susceptible)

0 2 4

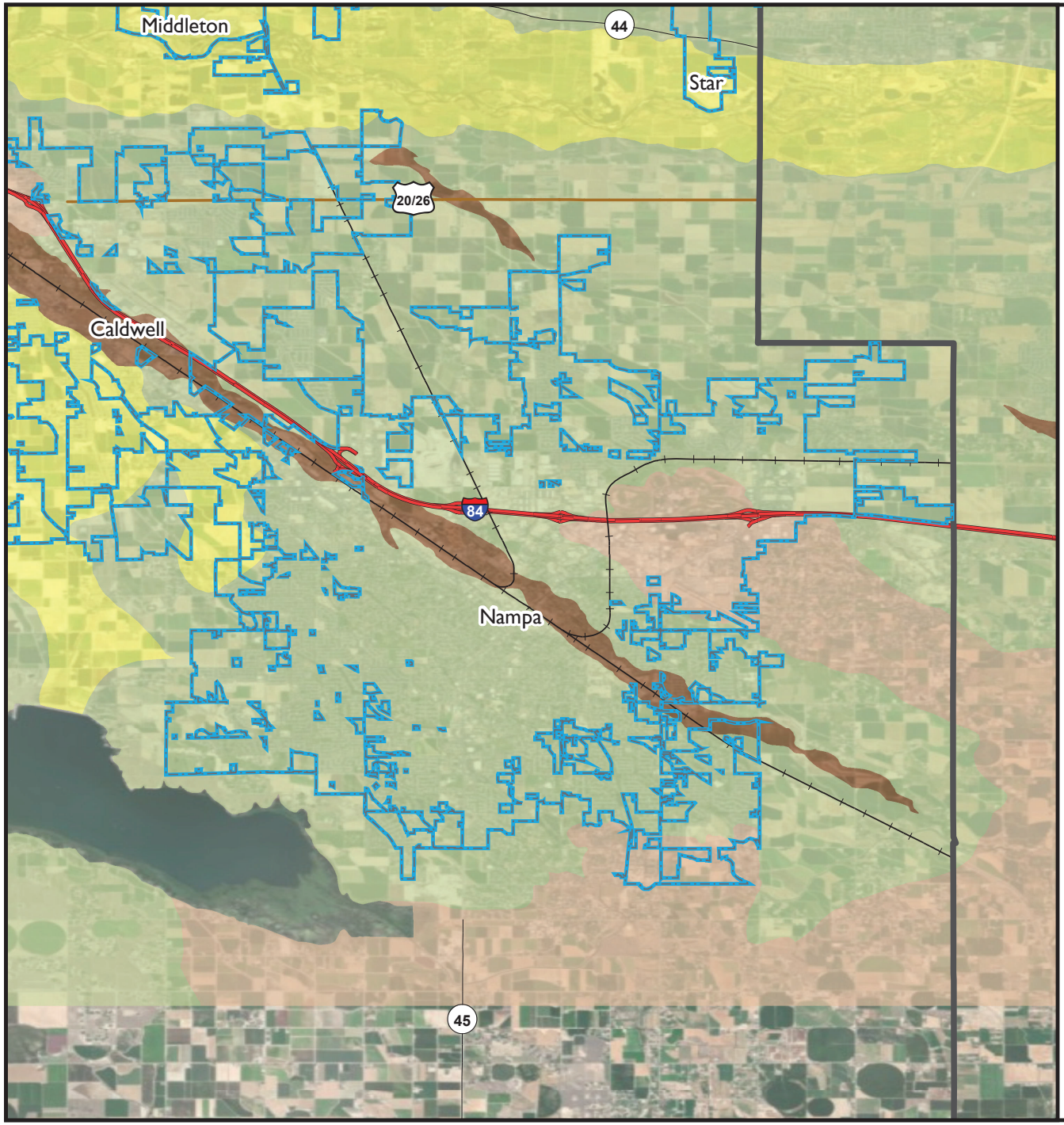
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Liquefaction Susceptibility: ID Geological Survey, 2011; ESRI Basemap, 2020



City of Nampa

NEHRP Soil

City Limits

Canyon County

NEHRP Soil Class

B (hard rock)

C (very dense soil and soft rock)

D (stiff soil)

E (soft soil)

0 2 4

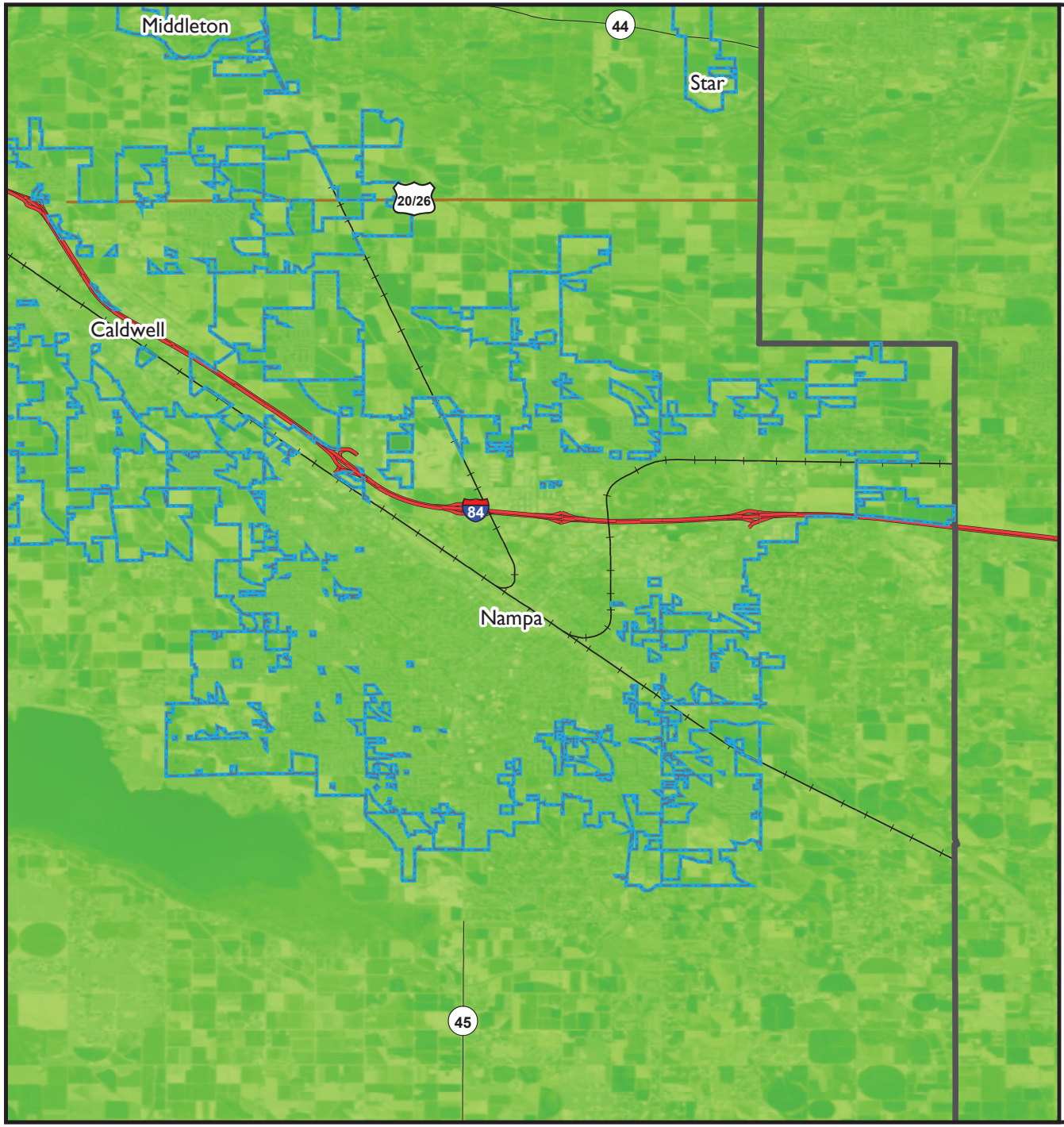
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, NEHRP Soils: ID Geological Survey, 2011; ESRI Basemap, 2020



City of Nampa

Cottonwood M7.0
Earthquake Event

City Limits

Canyon County

Modified Mercalli Intensity Scale

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

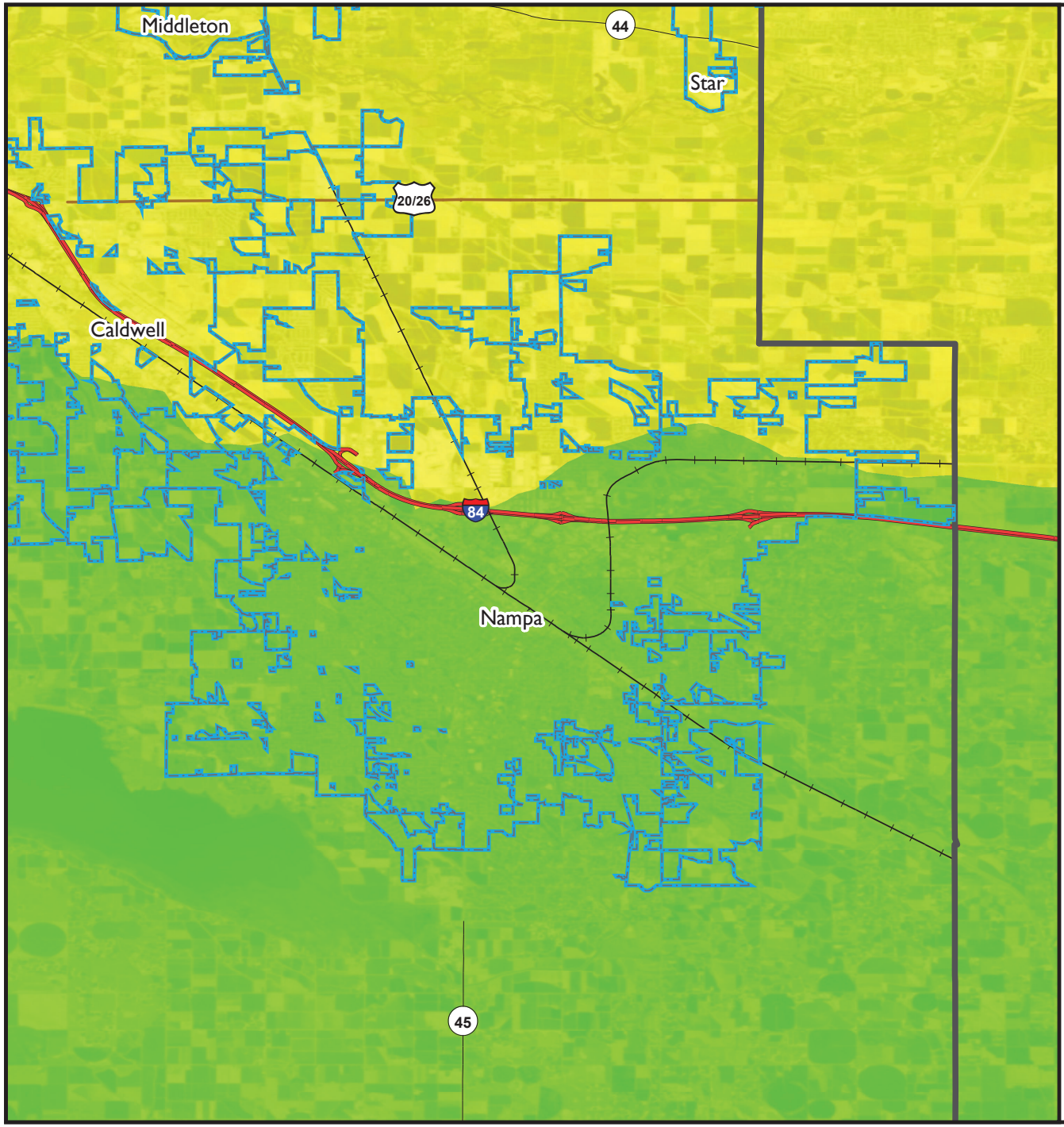
Intensity scale described as:
(potential damage – perceived shaking)

0 2 4

Miles

N
W E
S

Data Sources: Canyon County GIS, 2020, Earthquake: USGS, 2017; ESRI Basemap, 2020



City of Nampa

Squaw Creek M7.0
Earthquake Event

City Limits

Canyon County

Modified Mercalli Intensity Scale

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

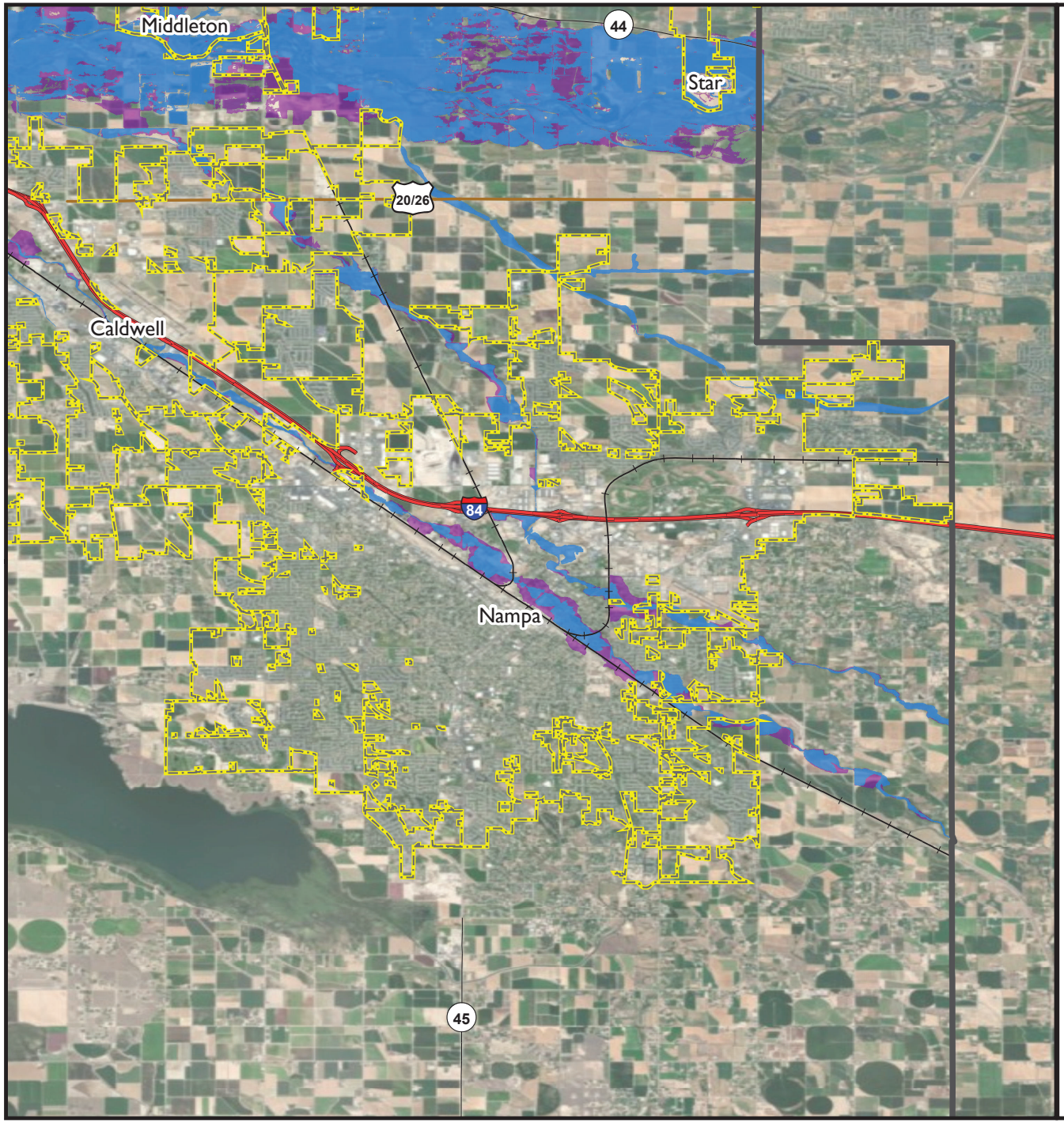
Intensity scale described as:
(potential damage – perceived shaking)

0 2 4

Miles

N
W E
S

Data Sources: Canyon County GIS, 2020, Earthquake: USGS, 2017; ESRI Basemap, 2020



City of Nampa

Flood Hazard

City Limits

Canyon County

1% Annual Chance Flood

0.2% Annual Chance Flood

0 1.5 3

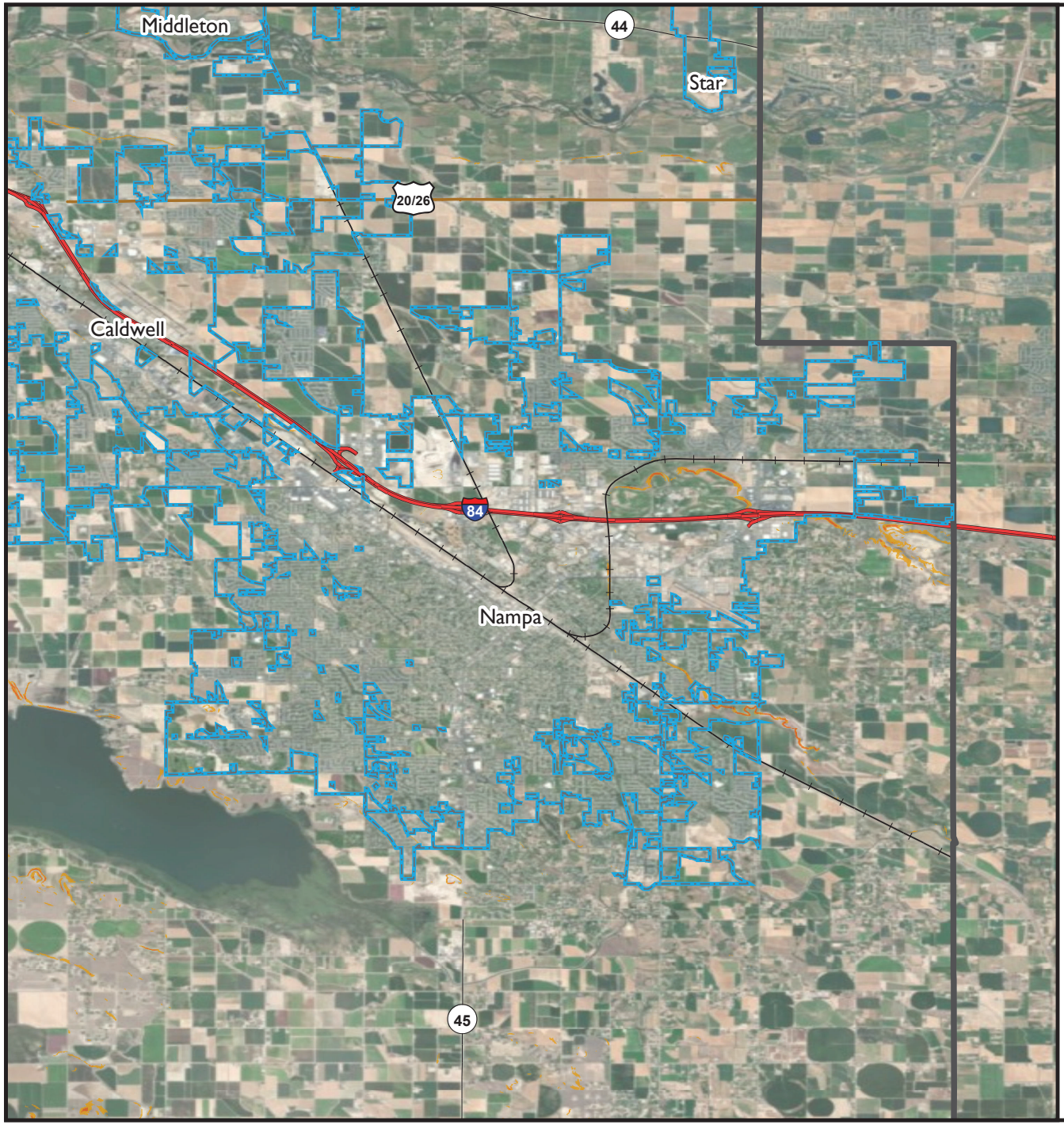
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Flood: FEMA, 2020; ESRI Basemap, 2020



City of Nampa

Landslide Hazard

City Limits

Canyon County

Landslide Susceptibility

15 to 30 Percent Slope

Greater than 30 Percent Slope

0 2 4

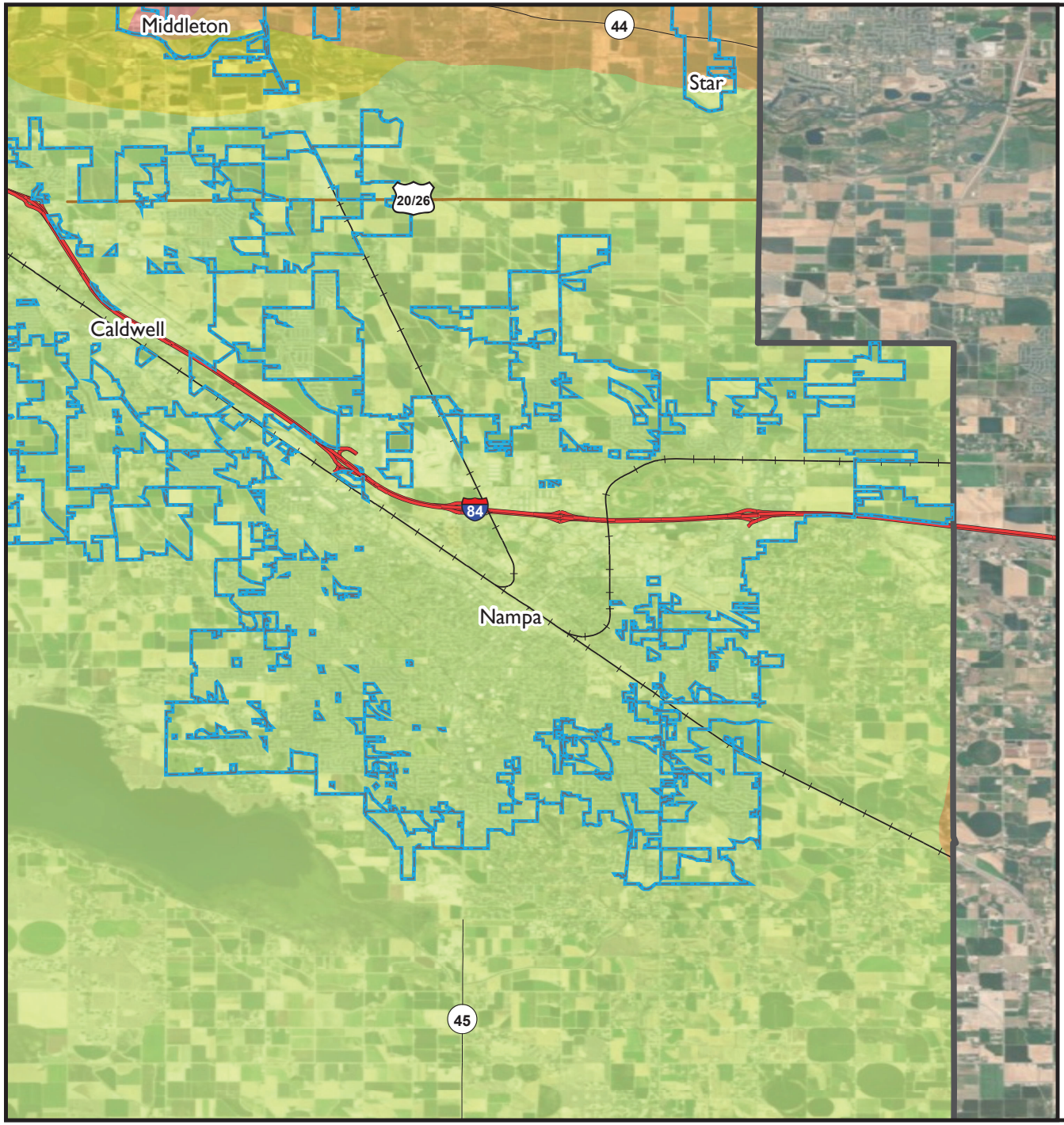
Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Landslide Susceptibility: USGS, 2020; ESRI Basemap, 2020



City of Nampa

Wildfire Hazard

City Limits

Canyon County

Relative Risk to Communities from Wildland Fire

Low

Low-Moderate

Moderate

Moderate-High

High

0 2 4

Miles

N

W E

S

Data Sources: Canyon County GIS, 2020, Wildfire Risk: US BLM, 2007; ESRI Basemap, 2020

7. City of Notus

The City of Notus did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

8. CITY OF PARMA

The City of Parma did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

9. City of Wilder

The City of Wilder did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

10. Canyon County Ambulance District

The Canyon County Ambulance District did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

11. BOISE RIVER FLOOD CONTROL DISTRICT #11

11.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
Jim Thorpe, Chairman
23498 Boise River Rd
Caldwell, ID 83607
Telephone: 208-859-2765
e-mail Address: jim@thorpefamilyrealty.com

Alternate Point of Contact
Mike Sterling, Board Member
26643 Market Rd
Parma, ID 83660
Telephone: 208-772-6837
e-mail Address: mike@parmapostandpole.com

The COVID 19 pandemic dictated that the Flood District No. 11 annex for the Canyon County Hazard Mitigation Plan be developed remotely rather than with face to face meetings and dialog. The annex was developed via phone conversations and emails among board members, their designated Canyon County Hazard Mitigation Plan representative, and their financial accountant. Two meetings were held with Boise River Flood District #11 board members and their secretary, one during phase II and one during phase III. The concerns, needs, and problem areas were discussed as well as proposed action items.

11.2 JURISDICTION PROFILE

11.2.1 Overview

Boise River Flood Control District No. 11 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 May 26, 1972, 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" as they relate to potential flooding in Canyon County 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. 11 covers a mainly agricultural area along the Boise River within the jurisdictional boundaries. There has been some development over years including gravel pits and residences but the majority of the land has remained agricultural. The primary issues the District faces is gravel buildup in the channel, and bank erosion. Sediment deposition reduces the conveyance capacity of the Boise River and increases flooding risks. Bank erosion affects private property and results in unstable and unsafe embankments. The 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 geographic extents of the District are generally along the Boise River from River Mile 22 (approximately 1-mile upstream of I-84 river bridges in Caldwell, ID) at the upstream end down to River Mile 0, or the confluence with the Snake River,

Flood Control District No. 11 has no full time employees. The three member board is made up of volunteers. Operations are funded from taxes levied on the land owners within the District's boundaries. Boise River Flood District No. 11 sees the benefit of working with other local jurisdictions in reducing the risk of natural disasters and adopts of Canyon County's Hazard Mitigation Plan.

11.2.2 Service Area and Trends

The district serves a population of approximately 7,423. Its service area covers an area of 24,680 acres. The area served by the has remained largely unchanged over the last 30 years. The Flood District serves a mainly agricultural area along the Boise River. There has been some development over years including gravel pits and residences but the majority of the land has remained agricultural.

11.2.3 Assets

The District owns no land, infrastructure, equipment, or critical facilities.

11.3 CAPABILITY ASSESSMENT

An assessment of the district's current capabilities was conducted to identify opportunities to expand, initiate or integrate capabilities in order 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.

11.3.1 Planning and Regulatory Capabilities

The following existing codes, ordinances, policies, programs, or plans may be applicable to the Multi-Hazard Mitigation Plan:

- State of Idaho, Stream Channel Alteration Permit
- US EPA, Clean Water Act, Section 404, Administered by the U.S. Army Corps of Engineers
- US EPA, Clean Water Act, National Pollutant Discharge Elimination System (NPDES)
- Municipal and County Floodplain Ordinances –
  - City of Caldwell
  - Canyon County
  - County Highway District #4
- Canyon County Hazard Mitigation Plan

11.3.2 Fiscal, Administrative and Technical Capabilities

Fiscal capability is an indicator of a jurisdiction's ability to fulfill the financial needs associated with hazard mitigation projects. An assessment of fiscal capabilities is presented in Table 11-1. Administrative and technical capabilities represent a jurisdiction's staffing resources for carrying out the mitigation strategy. An assessment of administrative and technical capabilities is presented in Table 11-2.

Table 11-1. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
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
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Federal Grant Programs	Yes

Table 11-2. Administrative and Technical Capability

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

11.3.3 Education and Outreach Capabilities

Outreach and education capability identifies the connection between government and community members, which opens a dialogue needed for a more resilient community. An assessment of education and outreach capabilities is presented in Table 11-3.

11.4 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 11-4 lists past occurrences of natural hazards that affected Flood District No. 11. Other hazard events that broadly affected the entire planning area, including Flood District No. 11, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 11-3. Education and Outreach

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? • **If yes, please briefly describe**	N/A
Do you use social media for hazard mitigation education and outreach? • **If yes, please briefly describe**	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • **If yes, please briefly specify**	Yes 3 member volunteer board
Do you have any other programs already in place that could be used to communicate hazard-related information? • **If yes, please briefly describe**	No
Do you have any established warning systems for hazard events? • **If yes, please briefly describe**	No

Table 11-4. Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Damage Assessment
Idaho Covid-19 Pandemic (DR-4534)	DR-4534	1/20/2020	N/A
Idaho Flooding (DR-4342)	DR-4342	3/29/2017	N/A
Idaho Drought (EM-3040)	EM-3040	05/7/1977	N/A
Idaho FLOODS (DR-143)	DR-143	2/14/1963	N/A
Idaho FLOODS (DR-120)	DR-120	2/14/1962	N/A
Idaho FLOODS (DR-116)	DR-116	6/26/1961	N/A
Idaho FLOOD (DR-76)	DR-76	5/27/1957	N/A
Idaho FLOODS (DR-55)	DR-55	4/22/1956	N/A

11.5 HAZARD RISK RANKING

Table 11-5 presents a local ranking for Flood District No. 11 of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 11-5. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Flood	39	High
2	Earthquake	32	High
3	Severe Weather	27	Medium
4	Dam Failure	18	Medium
5	Landslide	0	None
6	Drought	0	None
7	Wildfire	0	None

11.6 JURISDICTION-SPECIFIC VULNERABILITIES

Ongoing vulnerabilities of Flood District No. 11's includes ongoing riverbank erosion and sediment deposits in the river. The riverbank erosion makes adjacent farmland vulnerable and the sediment deposits affect the Boise River's ability to contain flood flows. If there is a major flood event, the District does not have any flood fighting material on hand to assist businesses or individuals within the District. Mitigation actions addressing these issues were prioritized for consideration in the action plan presented in this annex.

11.7 STATUS OF PREVIOUS PLAN ACTIONS

This Flood District No. 11's first time participating in the Canyon County Hazard Mitigation Plan so there are no prior action plans.

11.8 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 11-6 lists the actions that make up Flood District No. 11's mitigation action plan. Table 11-7 identifies the priority for each action. Table 11-8 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 11-6. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #FD11-1—Support CRS program participation of jurisdictions within Canyon County that interface with FD#11							
New	flooding	2, 3, 8, 11, 12	FD#11	TBD	Low	Volunteer Staff Time, General Funds	Short-term
Action #FD11-2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New	All Hazards	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	FD#11	TBD	Low	Volunteer Staff Time, General Funds	Long-term
Action #FD11-3—Remove sediment accumulation in the river channel due to 2017 flooding.							
New	Dam failure, flooding	5, 11, 12	FD#11	TBD	High	Volunteer Staff Time, General Funds, BRIC	Ongoing
Action #FD11-4—Create a Flood District NO. 11 website and include links to FEMA and Canyon County preparedness sites							
New	All Hazards	6, 8	FD#11	FEMA/GRANTS	Medium	Volunteer Staff Time, General Funds, BRIC	Short-term
Action #FD11-5—Develop a communications plan for Flood District members							
New	Dam Failure, flooding	5, 10	FD#11	TBD	Medium	General Funds, BRIC	Long-term
Action #FD11-6—Develop partnerships with local highway district, city, county staff to mitigate flood risk							
New	Dam failure, flooding	5.10	FD#11	TBD	Low	Volunteer Staff Time	Short-term
Action #FD11-7—Remove naturally occurring tree/vegetation blockages							
New	Dam Failure, Flooding	5, 11, 12	FD#11	TBD	High	Volunteer Staff Time, General Funds, BRIC	Ongoing

Table 11-7. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]
FD11-1		High	Low	Yes	No	Yes	High	Low
FD11-2		High	Low	Yes	No	Yes	High	Low
FD11-3		High	High	Yes	Yes	No	High	High
FD11-4		Medium	Low	Yes	Yes	No	Medium	Medium
FD11-5		High	High	Yes	Yes	No	Low	Low
FD11-6		Medium	Low	Yes	Yes	Yes	High	Medium
FD11-7		High	High	Yes	Yes	No	High	High

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

Table 11-8. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type[a]							
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Flood	FD11-1, FD11-2, FD11-3, FD11-7,	FD11-1, FD11-2, FD11-3, FD11-4, FD11-5, FD11-6, FD11-7	FD11-1, FD11-2, FD11-4, FD11-5, FD11-6	FD11-1, FD11-2, FD11-3, FD11-5, FD11-6, FD11-7	FD11-2, FD11-3, FD11-6, FD11-7		FD11-1, FD11-2, FD11-3, FD11-4, FD11-7	FD11-1, FD11-2, FD11-4, FD11-5, FD11-6
Earthquake		FD11-2	FD11-1, FD11-4, FD11-5	FD11-2	FD11-2		FD11-2, FD11-5	FD11-2, FD11-5
Severe Weather		FD11-1, FD11-2, FD11-4, FD11-5, FD11-6	FD11-1, FD11-4, FD11-5	FD11-2	FD11-2		FD11-2, FD11-5	FD11-1, FD11-2, FD11-5
Dam Failure		FD11-1, FD11-2, FD11-4, FD11-5, FD11-6	FD11-1, FD11-2, FD11-4, FD11-5	FD11-1, FD11-2, FD11-3, FD11-7	FD11-2		FD11-2, FD11-5	FD11-2, FD11-5

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

11.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Funding. Boise River Flood Control District #11 is located in a rural economically depressed area. The annual funds are generated based on a percentage of property tax revenue. Much of the land is agricultural and the per

acre value is low due to residential or commercial. .The annual income for the District from taxes is approximately $50,000. This is woefully short of what is needed to adequately fund a regular river maintenance program, much less any special projects. Most work is done through volunteer hours by the board members. In 2019, the District was awarded a grant by the State of Idaho and was able to do a vegetation/tree removal project.

11.10 REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

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

- **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.

12. GOLDEN GATE HIGHWAY DISTRICT

12.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
Gordon Bates, Director
500 E. Golden Gate Ave.
Wilder, Idaho 83676
Telephone: 208-482-6267
e-mail Address: gordonb@gghd3.org

Alternate Point of Contact
Casey Percifield, Foreman
500 E. Golden Gate Ave.
Wilder, Idaho 83676
Telephone: 208-482-6267
e-mail Address: gordonb@gghd3.org

This annex was developed over the course of several months with input from many district departments including operations, finance, and capital planning. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization. An action development meeting was held on February 20, 2018 and was attended by representatives from all previously listed department as well as the General Manager and representatives from the Board of Directors. Once actions had been identified and compiled in the annex, a draft was internally circulated for comment.

12.2 JURISDICTION PROFILE

12.2.1 Overview

The Golden Gate Highway District No. 3 was created in 1981 by Chapter 13 of Title 40 Idaho Code to provide for the rural roadway system in the unincorporated areas in western Canyon County. The three member elected Board of Highway District Commissioners assumes responsibility for the adoption of this plan; the Director of Highways will oversee its implementation. As of December 2019, the Highway District maintains 225 miles of paved and gravel roadways, 35 bridges over 20 feet, several hundred drainage structures/culverts and associated signs, with a staff of 10 full time employees. Funding comes primarily through local property tax levy and the Highway Distribution Account (vehicle registration fees and fuel tax).

12.2.2 Service Area and Trends

The Golden Gate Highway District No. 3 serves a population of about 6,000. Its service area covers 89 square miles. The District's service for the past decade has focused on road and bridge maintenance. Over the next five years, the District will shift focus to reconstruction of old and deteriorating roadways and two bridges. Growth forecast per COMPASS is about 9,000 in 2035. Much of the growth will be within expanding city limits for Greenleaf and Wilder. The District expects to add about 100 miles of roadway plus numerous bridges over canals.

12.2.3 Assets

Table 12-1 summarizes the critical assets of the district and their value.

Table 12-1. Special Purpose District Assets

Asset	Value
Property	
1,384 acres of land	$694,600
Critical Infrastructure and Equipment	
4 dump trucks, 4 pup trailers, 2 graders, 2 wheel loaders, 1 backhoe, and 1 roller compactor	$1,800,000
35 bridges over 20-ft	$19,702,090
Several Hundred drainage structures and culverts	$812,800
225 miles roadway	$106,425,000
Total:	***$129,434,490***
Critical Facilities	
1 Administration building with attached maintenance shop and other out buildings	$897,991
Total:	***$897,991***

12.3 CAPABILITY ASSESSMENT

An assessment of the district's current capabilities was conducted to identify opportunities to expand, initiate or integrate capabilities in order 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.

12.3.1 Planning and Regulatory Capabilities

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions. Table 12-2 summarizes existing codes, ordinances, policies, programs or plans that are applicable to this hazard mitigation plan.

12.3.2 Fiscal, Administrative and Technical Capabilities

Fiscal capability is an indicator of a jurisdiction's ability to fulfill the financial needs associated with hazard mitigation projects. An assessment of fiscal capabilities is presented in Table 12-3. Administrative and technical capabilities represent a jurisdiction's staffing resources for carrying out the mitigation strategy. An assessment of administrative and technical capabilities is presented in Table 12-4.

12.3.3 Education and Outreach Capabilities

Outreach and education capability identifies the connection between government and community members, which opens a dialogue needed for a more resilient community. An assessment of education and outreach capabilities is presented in Table 12-5.

Table 12-2. Planning and Regulatory Capability

	Date of Most Recent Update	Comment
Highway Standards & Development Procedures	2017	Section 3080 Bridge and Structure design requirements same for rivers, streams, and canals.
5-Year Capital Improvement Plan	2015	Update is underway and expected by August 2020
Transportation Plan	2012	

Table 12-3. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
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	No
Incur Debt through Private Activity Bonds	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Federal Grant Programs	Yes
Other—Idaho Highway Distribution Account (vehicle registration & fuel tax)	Yes

Table 12-4. Administrative and Technical Capability

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Director of Highways
Engineers or professionals trained in building or infrastructure construction practices	Yes	Director of Highways and contract support
Planners or engineers with an understanding of natural hazards	Yes	contract support
Staff with training in benefit/cost analysis	Yes	contract support
Surveyors	Yes	contract support
Personnel skilled or trained in GIS applications	Yes	contract support
Scientist familiar with natural hazards in local area	Yes	contract support
Emergency manager	No	Canyon County staff
Grant writers	Yes	contract support

Table 12-5. Education and Outreach

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? • **If yes, please briefly describe**	No
Do you use social media for hazard mitigation education and outreach? • **If yes, please briefly describe**	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • **If yes, please briefly specify**	No
Do you have any other programs already in place that could be used to communicate hazard-related information? • **If yes, please briefly describe**	Yes website
Do you have any established warning systems for hazard events? • **If yes, please briefly describe**	No

12.4 INTEGRATION WITH OTHER PLANNING INITIATIVES

The goal of plan integration is to ensure that the potential impact of hazards is considered in planning for future development. 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).

12.4.1 Existing Integration

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 such as Drainage Structure Rehab/Replacement which 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.

- **Canyon County Flood Hazard Overlay Codes**—The Golden Gate Highway District No. 3 coordinates with and secures permits from Canyon County for road, bridge, and culvert work within the floodplains. Potential sites are hazard risks and appropriate mitigation measures are considered in site design.

12.4.2 Opportunities for Future Integration

The following present opportunities for future integration of action items in the mitigation action plan:

- **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.

12.5 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 12-6 lists past occurrences of natural hazards that affected Golden Gate Highway District #3. Other hazard events that broadly affected the entire planning area, including Golden Gate Highway District #3, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 12-6. Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Damage Assessment
Idaho COVID-19 Pandemic	DR-4534	1/20/2020	Not available
Idaho Flooding	DR-4342	3/29/2017	$24,308.18
Heavy Snow (671749 – 678714)		12/24/2016 – 1/18/2017	$77,037.55
Idaho Drought	EM-3040	5/7/1977	Not available
Idaho Floods	DR-143	2/14/1963	Not available
Idaho Floods	DR-120	2/14/1962	Not available
Idaho Floods	DR-116	6/26/1961	Not available
Idaho Floods	DR-76	5/27/1957	Not available
Idaho Floods	DR-55	4/22/1956	Not available

12.6 HAZARD RISK RANKING

Table 12-7 presents a local ranking for Golden Gate Highway District #3 of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 12-7. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Dam Failure	9	Medium
2	Drought	6	Low
3	Flooding	18	Medium
4	Earthquake	32	High
5	Landslide	18	Medium
6	Severe Weather	27	Medium
7	Wildfire[a]	18	Low

a. Wildfire was reduced to Low due to the fact that farmland protects most roadways and a fire is not expected to cause significant damage to the District's roadways and bridges.

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

- The District's longest and most expensive bridge, Notus Road over the Boise River, would most likely be damaged by a dam failure on the Boise River system.
- Boise River flooding may impact roads and culverts in the flood plain near Notus.
- A high magnitude earthquake will cause damage to bridges, concrete drainage structures and potentially crack roadways.
- A 100-foot high bluff extends over 4 miles from Greenleaf to north of Wilder. The bluff has a combined slope greater than 30%. The toe of slope is adjacent to roadways and canals; therefore, a landslide has the potential to close roads and cause flooding.
- Severe weather (snowstorms or thunderstorms) may adversely impact budget due to plowing and cleanup labor & equipment costs. Roadways may be temporarily impassible.

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

12.8 STATUS OF PREVIOUS PLAN ACTIONS

Table 12-8 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 12-8. Status of Previous Plan Actions

Action Item	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Enter Action #
Identify critical evacuation routes in the Emergency Operations Plan			Yes	GG1
Comment:				
Enforce Policy to engineer canal crossing bridges & culverts to same standards as rivers & streams	YES			
Comment:				

12.9 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 12-9 lists the actions that make up the Golden Gate Highway District #3 hazard mitigation action plan. Table 12-10 identifies the priority for each action. Table 12-11 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 12-9. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action GG2—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.							
Existing	Earthquake, flooding, landslide, wildland fire	3, 4, 10	Canyon County	Golden Gate Highway District	High	HMGP, PDM, FMA	Short-term
Action GG3—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, wildland fire	1, 5, 8	Golden Gate Highway District #3		Low	Staff Time, General Funds	Short-term
Action GG4—Purchase generators for critical facilities and infrastructure that lack adequate back-up power including District maintenance shop.							
Existing	Dam failure, earthquake, flooding, landslide, severe weather, wildland fire	2, 6, 9	Golden Gate Highway District #3		Medium	HMGP, PDM	Short-term
Action GG5—Improve data and mapping of specific landslide risk near Greenleaf, Idaho, by completing an inventory of locations where critical facilities, buildings and infrastructure are vulnerable to landslides.							
New & Existing	Earthquake, landslide, severe weather	5, 8	Golden Gate Highway District	City of Greenleaf	Low	Staff time, General Funds	Short-term

Table 12-10. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]
GG1	3	High	Low	Yes	Yes	Yes	High	Low
GG2	3	High	High	Yes	Yes	No	Medium	High
GG3	3	High	Low	Yes	Yes	Yes	High	High
GG4	3	Medium	Low	Yes	Yes	No	Medium	Medium
GG5	2	Medium	Low	Yes	Yes	Yes	High	Medium

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

Table 12-11. 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
Dam Failure	GG-2, 3, 4	GG2	GG1		GG4			
Drought	GG3		GG1					
Flooding	GG-2, 3, 4	GG2	GG1		GG4			
Earthquake	GG-2, 3, 4, 5		GG1		GG4			
Landslide	GG-2, 3, 4, 5	GG2	GG1					
Severe Weather	GG-3, 4, 5		GG1		GG4			
Wildfire	GG-2, 3, 4		GG1		GG4			

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

12.10 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Reference Action GG5—Additional analyses of the Bluff slope and impacts of irrigation and groundwater will result in identifiable high risk segments. Vulnerability of roadways and canals in these high risk segments should then be studied and mitigation actions identified.

12.11 REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

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

- **Audit of the Financial Statements September 30, 2019**—Values for land and buildings are from this report.
- **GGHD Deferred Maintenance by Paragon Consulting**—Values for infrastructure are from these spreadsheets
- **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.

13. Wilder Rural Fire District

The Wilder Rural Fire District did not complete the three-phase jurisdictional annex process. This jurisdiction will be eligible to link to the plan by completing the process described in the introduction to this volume within one year of FEMA approval of the plan. Failure to complete the process within this timeframe will result in the jurisdiction being ineligible for coverage under this plan.

14. NAMPA SCHOOL DISTRICT #131

14.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
Anita Christenson Koons, Safety Administrator
619 S. Canyon
Nampa, Idaho 83686
Telephone: 208-468-4600
e-mail Address: achristenson@nsd131.org

Alternate Point of Contact
Kathleen Tuck Director of Communications & Community Relations
619 S. Canyon
Nampa, Idaho 83686
Telephone: 208-468-4600
e-mail Address: ktuck@nsd131.org

This annex was developed over the course of several months with input from many district departments including operations, finance, and members of the executive cabinet. All departments were asked to contribute to the annex development through reviewing and contributing information. The Director of Operations, Maintenance Supervisor, Director of Finance, Student Safety Administrator, and Public Information Officer for the Nampa School District participated in the development of this annex. In addition, the district emergency operation team and each building emergency team through the emergency operation annual planning process provided information and needs assessments that were considered in the creation of this annex and the feedback from the members of these teams played a part in the creation of the action items.

14.2 JURISDICTION PROFILE

14.2.1 Overview

The Nampa School District of the City of Nampa #131 was established in 1948, officially combining a number of smaller school districts in the area to provide public education to school-age children. The Nampa School District is the largest employer in Canyon County with 887 certified staff; 55 administrators; 612 classified staff; and 265 substitutes. The District contributes further to the local workforce through contracts with Brown Bus Company for busing; American Building Maintenance for custodial services; Nampa Police Department for school resource officers; and companies such as Chatterbox for speech language services. Funding comes primarily through state and federal funding sources, with some money through bonds and supplemental levies from patron property taxes.

The school district is governed by a five-person elected school board with a superintendent responsible for day-to-day operations. The Nampa School District assumes responsibility for the adoption of this plan; Nampa School District Board of Trustees will oversee its implementation.

14.2.2 Service Area and Trends

The District currently serves a population of roughly 83,620 residents of the city of Nampa and Canyon County according to 2010 Census Data. The District operates 42 facilities to serve a student population of approximately 14,000 pre-kindergarten through 12th grade students making the District the third largest school district in Idaho. Its service area covers an area of 94.87 square miles. While the City of Nampa has grown, the largest age group moving into the city are over the age of 50 without school aged children, so the enrollment trend for the district has decreased slightly over the past few years.

14.2.3 Assets

Table 14-1 summarizes the critical assets of the district and their value.

Table 14-1. Special Purpose District Assets

Asset	Value
Property	
600.86 acres of land	$122,000,000
Critical Infrastructure and Equipment	
Bobcat Excavator	$75,000
Bobcat skid steer	$65,000
Case Backhoe	$20,000
6 Pickup Trucks	$240,000
1 Bucket Truck	$70,000
3 Vans	$120,000
3 16' Mowers	$240,000
Total	***$830,000***
Critical Facilities	
Centennial Elementary School	$17,974,638
Central Elementary School • **2 Portable Classrooms**	$18,403,625 $200,000
Endeavor Elementary	$20,861,267
Franklin D Roosevelt Elementary School • **1 Portable Classroom**	$20,504,233 $100,000
Greenhurst Elementary • **1 Portable Classroom**	$18,225,715 $100,000
Iowa Elementary • **1 Portable Classroom**	$20,504,233 $100,000
Lake Ridge Elementary	$20,709,467
New Horizons Dual Language Magnet	$20,861,267
Owyhee Elementary School • **2 Portable Classrooms**	$20,504,233 $200,000
Park Ridge Elementary & Treasure Valley Leadership Academy	$19,913,428
Ronald Reagan Elementary • **2 Portable Classrooms**	$20,504,233 $200,000
Sherman Elementary	$19,913,428
Snake River Elementary	$17,128,505

Asset	Value
Willow Creek Elementary	$20,861,267
• **2 Portable Classrooms**	$200,000
East Valley Middle School	$41,294,943
• **4 Portable Classroom**	$400,000
Lone Star Middle School	$48,117,055
South Middle School	$39,164,400
• **2 Portable Classrooms**	$200,000
West Middle School	$34,028,968
• **1 Portable Classroom**	$100,000
Columbia High School	$87,635,924
• **Pro Tech Building**	$4,574,679
Nampa High School	Total for all buildings: $80,956,763
• **Bldg. 100-200 + Science Wing**	$18,889,423
• **Bldg. 1000**	$4,426,488
• **Bldg. 250**	$4,755,401
• **Bldg. 300**	$4,537,150
• **Bldg. 400 Auto**	$6,885,648
• **Bldg. 500**	$7,772,653
• **Bldg. 600**	$12,839,548
• **Bldg. 700 & Main Office**	$7,993,978
• **Bldg. 800**	$9,272,248
• **Bldg. 900**	$3,584,226
Skyview High School	$76,867,194
• **1 Portable Classroom**	$100,000
Union High School	$19,853,618
Gateways	$10,170,600
District Office	$3,000,000
Parent Education Center South	$300,000
Technology Center	$2,200,000
• **Quonset Hut**	$270,000
Nutrition Services	Total for all buildings: $1,017,920
• **Warehouse 1**	$544,000
• **Warehouse 2**	$473,920
Warehouse	Total for all buildings $2,671,600
• **Maintenance**	$2,460,400
• **Back Shop**	$211,200
Warehouse 2	$1,772,000
• **Small Warehouse**	$163,200
Block Building	$455,000
Old Scism School	$400,000
• **3 Portable Classrooms**	$150,000
Old Parkview Preschool	$590,000
• **2 Portable Classrooms**	$100,000
Book Warehouse	$264,000
• **Old Walk-in Fridge/Freezer**	$120,000
Total	***$734,907,403***

14.3 CAPABILITY ASSESSMENT

An assessment of the district's current capabilities was conducted to identify opportunities to expand, initiate or integrate capabilities in order 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.

14.3.1 Planning and Regulatory Capabilities

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions. Table 14-2 summarizes existing codes, ordinances, policies, programs or plans that are applicable to this hazard mitigation plan.

Table 14-2. Planning and Regulatory Capability

	Date of Most Recent Update	Comment
NSD Policy 8300 Emergency and Disaster Preparedness	2/25/2020	Directs the creation of an all hazards approach to emergency operations plans and the implementation of the plan.
NSD Policy 8320 Emergency Response Drills	2/25/2020	Directs the need for carrying out emergency response drills.
NSD District Emergency Operations Plan	9/1/2019	Multi-hazard, comprehensive plan for emergency responses from the district level. Not a public facing document.
NSD Individual Building Emergency Operations Plan	10/1/2019	Multi-hazard, comprehensive plan for emergency responses for each building. Not public facing documents
Idaho Administrative Code (IDAPA 08.02.03)	3/20/2014	Requires each district have comprehensive districtwide policy including building safety.
Supplemental Levy Capital Improvement Projects	2/2020	Outlines the use of seven million dollars of supplemental levy funding for building improvement projects

14.3.2 Fiscal, Administrative and Technical Capabilities

Fiscal capability is an indicator of a jurisdiction's ability to fulfill the financial needs associated with hazard mitigation projects. An assessment of fiscal capabilities is presented in Table 14-3. Administrative and technical capabilities represent a jurisdiction's staffing resources for carrying out the mitigation strategy. An assessment of administrative and technical capabilities is presented in Table 14-4.

Table 14-3. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Capital Improvements Project Funding	Yes (Lottery & Supplemental Levy)
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 (voter approval)
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Federal Grant Programs	Yes

Table 14-4. Administrative and Technical Capability

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	We can contract for this
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	Yes	Chief Financial Officer and staff
Surveyors	No	
Personnel skilled or trained in GIS applications	No	
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	District Assessment/Safety Admin
Grant writers	No	

14.3.3 Education and Outreach Capabilities

Outreach and education capability identifies the connection between government and community members, which opens a dialogue needed for a more resilient community. An assessment of education and outreach capabilities is presented in Table 14-5.

Table 14-5. Education and Outreach

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? • If yes, please briefly describe	No
Do you use social media for hazard mitigation education and outreach? • If yes, please briefly describe	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, please briefly specify	Yes District Emergency Operations Committee Meets monthly and has members of law enforcement, fire, variety of administrators
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, please briefly describe	No
Do you have any established warning systems for hazard events? • If yes, please briefly describe	No

14.4 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 14-6 lists past occurrences of natural hazards that affected the Nampa School District. Other hazard events that broadly affected the entire planning area, including Nampa School District, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 14-6. Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	Date	Damage Assessment
Idaho Covid-19 Pandemic	DR-4534	1/20/2020	Ongoing costs
Hail Storm		9/5/2013	$272,388.28
Sever Winter Storm Damage		12/24/2016-1/18/2017	$570,017.49

14.5 HAZARD RISK RANKING

Table 14-7 presents a local ranking for Nampa School District of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 14-7. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Earthquake	32	High
2	Severe Weather	27	Medium
3	Flooding	18	Medium
4	Landslide	15	Medium
5	Drought	6	Low
6	Dam Failure	6	Low
7	Wildfire	0	None

14.6 JURISDICTION-SPECIFIC VULNERABILITIES

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. No key vulnerabilities for the District have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources.

14.7 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 14-8 lists the actions that make up the Nampa School District #131 hazard mitigation action plan. Table 14-9 identifies the priority for each action. Table 14-10 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 14-8. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action NSD#1—Where appropriate, support retro-fitting, both structural and non-structural located in high hazard areas, prioritizing those structures that have are located in high or medium ranked hazard areas.							
Existing	Earthquake, severe weather	1, 3, 9	Nampa School District	NA	High	FEMA Grants, General fund, Lottery funds	Long-term
Action NSD#2—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, tsunami, wildland fire	1-14	Nampa School District	Canyon County Office of Emergency Management	Low	Staff Time	Short-term
Action NSD#3—Purchase generators for critical facilities and infrastructure that lack adequate back-up power including any locations needed during emergency shelter needs.							
Existing	Dam failure, earthquake, flooding, landslide, severe weather	1-14	Nampa School District	Canyon County Emergency Management and Red Cross	High	FEMA Grants, Safe and Drug Free School Dollars	Short-term, depends on funding
Action NSD#4—Integrate the Canyon County Mitigation planning into the NSD Emergency Operation Plan.							
Existing	Dam failure, earthquake, flooding, landslide, severe weather	1-14	Nampa School District	Canyon County Emergency Management	Low	Existing District Funds	Short-term
Action NSD#5—Develop a comprehensive recovery planning section to our Emergency Operation Plan.							
New and Existing	Dam failure, earthquake, flooding, landslide, severe weather	1-14	Nampa School District	NA	High	BRIC, General Fund	Short-term, depends on funding

Table 14-9. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	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	Low	High
2	14	High	Low	Yes	No	Yes	High	Low
3	14	High	High	Yes	Yes	No	Medium	High
4	14	High	Low	Yes	No	Yes	High	Low
5	14	High	High	Yes	Yes	No	Medium	High

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

Table 14-10. 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
Dam Failure	2	1			3, 4, 5			2
Drought	2	1			3, 4, 5			2
Earthquake	2	1			3, 4, 5			2
Flood	2	1			3, 4, 5			2
Landslide	2	1			3, 4, 5			2
Severe Weather	2	1			3, 4, 5			2
Wildfire	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

14.8 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

If man-made or caused disasters (ex: active shooter, cyber-attacks, etc.) could be included in risk and vulnerability assessments.

14.9 REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

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

- Cooperative Strategies *My Facility Informer* and its *Facility Condition Assessment* were used to determine replacement cost of individual buildings it assumes "like for like" system(s) and does not take into consideration design changes or code upgrades.
- Hazard Mitigation Plan Annex Development Tool-kit—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.
- Insurance claims and finance reports
- Nampa School District Emergency Operation Plans
- Supplemental Levy Projects as outlined to the public
- VersaTrans was used to calculate the square miles the NSD encompasses.

Appendix A. Planning Partner Expectations

A. PLANNING PARTNER EXPECTATIONS

ACHIEVING DMA COMPLIANCE FOR ALL PLANNING PARTNERS

One of the goals of the multi-jurisdictional approach to hazard mitigation planning is to achieve compliance with the Disaster Mitigation Act (DMA) for all participating members in the planning effort. DMA compliance must be certified for each member in order to maintain eligibility for the benefits under the DMA. Whether a hazard planning process generates multiple individual plans or one large plan with a chapter for each partner jurisdiction, the following items must be addressed by each planning partner to achieve DMA compliance:

- **Participation in the process—**It must be documented in the plan that each planning partner participated in the process that generated the plan. There is flexibility in defining "participation." It can vary, based on the type of planning partner (i.e., city or county vs. special purpose district). However, the level of participation must be defined and the extent for which this level of participation has been met for each partner must be contained in the plan.
- **Consistency Review—**Review of existing documents pertinent to each jurisdiction to identify policies or recommendations that are not consistent with those documents reviewed in producing the "parent" plan or have policies and recommendations that complement the hazard mitigation initiatives selected (i.e.: comp plans, basin plans or hazard specific plans).
- **Action Review—**For plan updates, a review of the strategies from your prior action plan to determine those that have been accomplished and how they were accomplished; and why those that have not been accomplished were not completed.
- **Update of Localized Risk Assessment—**Customize the risk assessment for each jurisdiction by removing hazards not associated with the defined jurisdictional area or redefining vulnerability based on a hazard's impact to a jurisdiction. This phase will include:
  - A ranking of the risk
  - A description of the number and type of structures at risk
  - An estimate of the potential dollar losses to vulnerable structures
  - A general description of land uses and development trends within the community, so that mitigation options can be considered in future land use decisions.
- **Capability assessment—**Each planning partner must identify and review its individual regulatory, technical, and financial capabilities with regards to the implementation of hazard mitigation actions.
- **Identification of mitigation recommendations—**Identify and prioritize mitigation recommendations specific to each jurisdiction's defined area.
- **Development of an Action Plan.**
- **Public Participation—**Each jurisdiction must present the plan to the public for comment at least once, within two weeks prior to adoption.

- Plan must be adopted by each jurisdiction.

One of the benefits to multi-jurisdictional planning is the ability to pool resources. This means more than monetary resources. Resources such as staff time, meeting locations, media resources, technical expertise will all need to be utilized to generate a successful plan. In addition, these resources can be pooled such that decisions can be made by a peer group applying to the whole and thus reducing the individual level of effort of each planning partner. This will be accomplished by the formation of a steering committee made up of planning partners and other "stakeholders" within the planning area. The size and makeup of this steering committee will be determined by the planning partnership. This body will assume the decision-making responsibilities on behalf of the entire partnership. This will streamline the planning process by reducing the number of meetings that will need to be attended by each planning partner. The assembled Steering Committee for this effort will meet monthly on an as-needed basis as determined by the planning team, and will provide guidance and decision making during all phases of the plan's development.

PARTICIPATION

Each partner is expected to develop its section of the plan. To be an eligible planning partner in this effort, each planning partner shall provide the following:

- A "Letter of Intent to participate" or resolution to participate submitted to the planning team (see exhibit A).
- Designation of a lead point of contact for this effort. This designee will be listed in the plan.
- Support for and participation in the selection and function of the Steering Committee overseeing the development of this plan.
- Support in the form of mailing lists, possible meeting space, and public information materials, such as newsletters, newspapers, or direct mailed brochures, required to implement the public involvement strategy developed by the Steering Committee.
- Participation in the process. There will be many opportunities as this plan evolves to participate, such as:
  - Steering Committee meetings
  - Public meetings or open houses
  - Workshops and training sessions
  - Public review and comment periods prior to adoption

Attendance recorded at each participation opportunity will be used to document participation for each planning partner. No thresholds will be established as minimum levels of participation. However, each planning partner should attempt to attend all possible meetings and events.

ANNEX PREPARATION

There will be one ***mandatory*** workshop that all planning partners will be required to attend. This workshop will cover the proper completion of the jurisdictional annex template, which is the basis for each partner's jurisdictional chapter in the plan. Failure to have a representative at this workshop will disqualify the planning partner from participation in this effort. The schedule for this workshop will be such that all committed planning partners will be able to attend.

After participation in the mandatory template workshop, each partner will be required to complete a template and provide it to the planning team in the time frame established by the Steering Committee. Failure to complete your template in the required time frame may lead to disqualification from the partnership.

Each partner will be expected to perform a "consistency review" of all technical studies, plans, ordinances specific to hazards to determine the existence of any not consistent with the same such documents reviewed in the preparation of the County (parent) Plan. For example, if your community has a floodplain management plan that makes recommendations that are not consistent with any of hazard mitigation plan recommendations, that plan will need to be reviewed for probable incorporation into the plan for your area.

Each partner will be expected to review the risk assessment and identify hazards and vulnerabilities specific to its jurisdiction. The planning team will provide the jurisdiction-specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.

Each partner will be expected to review and determine if the mitigation recommendations chosen in Volume 1 of the plan will meet the needs of its jurisdiction. Projects for each jurisdiction, consistent with the Volume 1 plan recommendations, will need to be identified, prioritized, and reviewed to determine their benefits vs. costs.

Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.

Templates and instructions to aid in the compilation of this information will be provided to all committed planning partners. Each partner will be expected to complete a template according to the timeline specified by the Steering Committee.

PUBLIC PARTICIPATION, ADOPTION, AND PLAN IMPLEMENTATION

Each partner will be required to sponsor at least one public meeting to present the draft plan to its constituents at least 2 weeks prior to adoption.

Each partner will be required to formally adopt the plan.

Once this plan is completed, and DMA compliance has been determined for each partner, maintaining that eligibility will be dependent upon each partner implementing the plan implementation-maintenance protocol identified in the plan. At a minimum, this means completing the ongoing plan maintenance protocol identified in the plan. Partners that do not participate in this plan maintenance strategy may be deemed ineligible by the partnership, and thus lose their DMA eligibility.

EXHIBIT A. EXAMPLE LETTER OF INTENT TO PARTICIPATE

Canyon County Hazard Mitigation Planning Partnership

C/O Rob Flaner, Tetra Tech, Inc.

90 South Blackwood Ave.

Eagle, ID 83616

Dear Canyon County Planning Partnership,

Please be advised that the _____ (insert City or district name) is committed to participating in the update to the Canyon County Hazard Mitigation Plan. As the jurisdictional representative tasked with this planning effort, I certify that we will commit all necessary resources in order to meet Partnership expectations as outlined in the "Planning Partners Expectations" document provided by the planning team, in order to obtain Disaster Mitigation Act (DMA) compliance for our jurisdiction.

Mr./Ms. _____ will be our jurisdiction's point of contact for this process and can be reached at ***(insert address, phone number and e-mail address).***

Sincerely,

Name _____

Title _____

EXHIBIT B. PLANNING TEAM CONTACT INFORMATION

Name	Representing	Address	Phone	e-mail
	Canyon County			
	Canyon County			
Rob Flaner	Tetra Tech, Inc.	90 S. Blackwood Ave Eagle, ID 83616	(208) 939-4391	Rob.flaner@tetratech.com
Carol Bauman	Tetra Tech, Inc.	1020 SW Taylor St., Ste. 530 Portland, Oregon 97205	(503) 223-5388	Carol.Baumann@tetratech.com

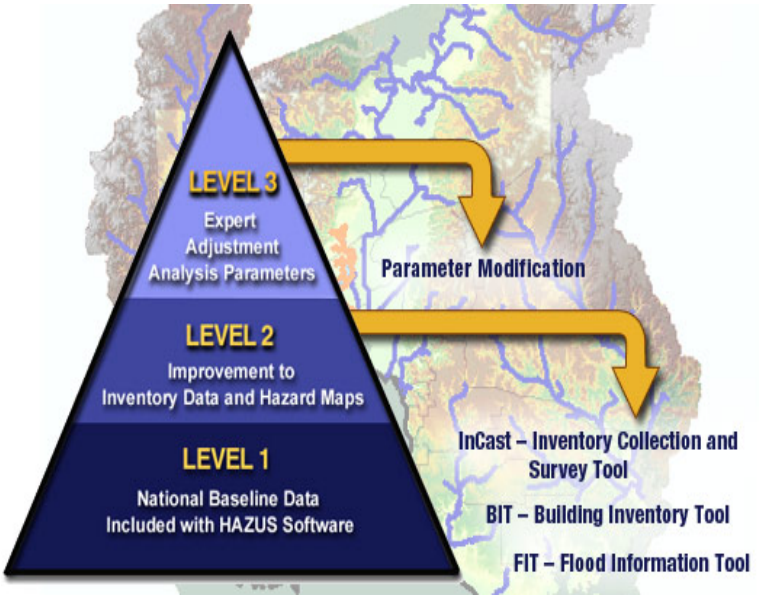
EXHIBIT C. OVERVIEW OF HAZUS



Overview of Hazus

http://www.fema.gov/hazus/dl_mhpres.shtm

Hazus is a nationally applicable standardized methodology and software program that contains models for estimating potential losses from earthquakes, floods, and hurricane winds. Hazus was developed by the Federal Emergency Management Agency (FEMA) under contract with the National Institute of Building Sciences (NIBS). NIBS maintains committees of wind, flood, earthquake, and software experts to provide technical oversight and guidance to Hazus development. Loss estimates produced by Hazus are based on current scientific and engineering knowledge of the effects of hurricane winds, floods, and earthquakes.



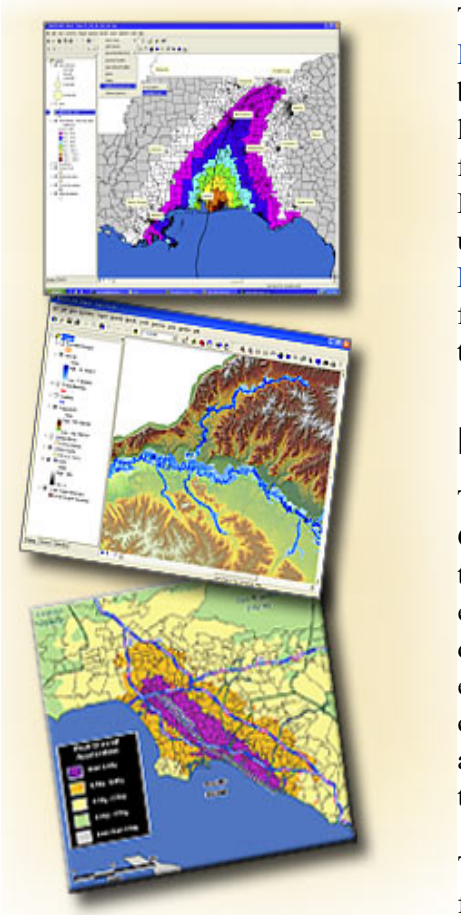
Estimating losses is essential to decision-making at all levels of government, providing a basis for developing mitigation plans and policies, emergency preparedness, and response and recovery planning.

Hazus uses state-of-the-art geographic information system (GIS) software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of hurricane winds, floods, and earthquakes on populations. The latest release incorporates new features that improve both the speed and functionality of the models. For information on software and hardware requirements, see Hazus Hardware and Software Requirements.

Hazus Analysis Levels

Hazus provides for three levels of analysis:

- A Level 1 analysis yields a rough estimate based on the nationwide database and is a great way to begin the risk assessment process and prioritize high-risk communities.
- A Level 2 analysis requires the input of additional or refined data and hazard maps that will produce more accurate risk and loss estimates. Assistance from local emergency management personnel, city planners, GIS professionals, and others may be necessary for this level of analysis.
- A Level 3 analysis yields the most accurate estimate of loss and typically requires the involvement of technical experts such as structural and geotechnical engineers who can modify loss parameters based on to the specific conditions of a community. This level analysis will allow users to supply their own techniques to study special conditions such as dam breaks and tsunamis. Engineering and other expertise is needed at this level.



Three data input tools have been developed to support data collection. The Inventory Collection Tool (InCAST) helps users collect and manage local building data for more refined analyses than are possible with the national level data sets that come with Hazus . InCAST has expanded capabilities for multi-hazard data collection. Hazus includes an enhanced Building Inventory Tool (BIT) allows users to import building data and is most useful when handling large datasets, such as tax assessor records. The Flood Information Tool (FIT) helps users manipulate flood data into the format required by the Hazus flood model. All Three tools are included in the Hazus Application DVD.

Hazus Models

The Hazus **Hurricane Wind Model** gives users in the Atlantic and Gulf Coast regions and Hawaii the ability to estimate potential damage and loss to residential, commercial, and industrial buildings. It also allows users to estimate direct economic loss, post-storm shelter needs and building debris. In the future, the model will include the capability to estimate wind effects in island territories, storm surge, indirect economic losses, casualties, and impacts to utility and transportation lifelines and agriculture. Loss models for other severe wind hazards will be included in the future. Details about the Hurricane Wind Model.

The Hazus **Flood Model** is capable of assessing riverine and coastal flooding. It estimates potential damage to all classes of buildings, essential facilities, transportation and utility lifelines, vehicles, and agricultural crops. The model addresses building debris generation and shelter requirements. Direct losses are estimated based on physical damage to structures, contents, and building interiors. The effects of flood warning are taken into account, as are flow velocity effects. Details about the Flood Model.

The Hazus **Earthquake Model**, The HAZUS earthquake model provides loss estimates of damage and loss to buildings, essential facilities, transportation and utility lifelines, and population based on scenario or probabilistic earthquakes. The model addresses debris generation, fire-following, casualties, and shelter requirements. Direct losses are estimated based on physical damage to structures, contents, inventory, and building interiors. The earthquake model also includes the Advanced Engineering Building Module for single- and group-building mitigation analysis. Details about the Earthquake Model.

The updated earthquake model released with Hazus includes:

- The (September 2002) National Hazard Maps
- Project ‘02 attenuation functions
- Updated historical earthquake catalog (magnitude 5 or greater)
- Advanced Engineering Building Module for single and group building mitigation analysis

Additionally, Hazus can perform multi-hazard analysis by providing access to the average annualized loss and probabilistic results from the hurricane wind, flood, and earthquake models and combining them to provide

integrated multi-hazard reports and graphs. Hazus also contains a third-party model integration capability that provides access and operational capability to a wide range of natural, man-made, and technological hazard models (nuclear and conventional blast, radiological, chemical, and biological) that will supplement the natural hazard loss estimation capability (hurricane wind, flood, and earthquake) in Hazus.

Appendix B. Annex Instructions and Templates

INSTRUCTIONS FOR MUNICIPAL ANNEX COMPLETION

INSTRUCTIONS FOR COMPLETING MUNICIPAL ANNEX TEMPLATE

The jurisdictional annex templates for the 2020 Canyon County Hazard Mitigation Plan update will be completed in three phases. **This document provides instructions for completing Phase 1 of the template for municipalities.**

The target timeline for phase completion is as follows:

- **Phase 1** – Jurisdictional profile
  - Deployed: December 13, 2019
  - Due: **January 31, 2020**
- **Phase 2** – Capability assessment
  - Deployed: February 18,2020
  - Due: **April 30, 2020**
- **Phase 3** – Risk ranking and action plan development
  - Deployed: June 23, 2020
  - Due: **July 31,2020, COB**

Any questions on completing the template should be directed to:

Rob Flaner
Tetra Tech, Inc.
(208) 939-4391
E-mail: rob.flaner@tetratech.com

Municipality Annex:

This document provides instructions for completing **Phase 1** of the jurisdictional annex template for municipalities. **Templates should be completed by April 20, 2018.** Your completed template should be submitted to:

Rob Flaner
Tetra Tech, Inc.
(208) 939-4391
E-mail: rob.flaner@tetratech.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 within the yellow, highlighted text that is currently in the template, rather than creating text in another document and pasting it into the template. Text from another source will alter the style and formatting of the document.

The numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of this numbering.

PHASE 1 INSTRUCTIONS

CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your municipality (City of Pleasantville, West County, etc.). Please do not change the chapter number. Revise only the jurisdiction name.

HAZARD MITIGATION PLAN POINT 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, please let the planning team know by inserting a comment into the document.

JURISDICTION PROFILE

Provide information specific to your jurisdiction as indicated, in a style similar to the example provided in the box below. This should be information that will not be provided in the overall mitigation plan document. For population data, use the most current population figure for your jurisdiction based on an official means of tracking (e.g., the U.S. Census or state office of financial management).

Example Jurisdiction Profile:

- **Date of Incorporation**—1858
- **Current Population**—17,289 as of July 2014 (2014 Department of Finance estimates)
- **Population Growth**—Based on state Department of Finance data, Smithburg has experienced a flat rate of growth. The population increased only 3.4% since 2010 and growth averaged 0.74% per year from 2000 to 2014.
- **Location and Description—**The City of Smithburg is on the Pacific coast, 760 miles north of Los Angeles and 275 miles north of San Francisco. The nearest seaport is Eureka, five miles south on Humboldt Bay. Smithburg is the home of Smithburg State University and is situated between the communities of Murphy to the north and Blue Lake to the east. It sits at the intersection of US Highway 101 and State Route 299.
- **Brief History**—The Smithburg 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 resource. Smithburg was incorporated in 1858 and by 1913 the Smithburg Teachers College, a predecessor to today's Smithburg State University was founded. Recently, the presence of the college has come to shape Smithburg's population into a young, liberal, and educated crowd. In 1981 Smithburg developed the Smithburg Marsh and Wildlife sanctuary, an environmentally friendly sewage treatment enhancement system.
- **Climate**—Smithburg's weather is typical of the Northern California coast, with mild summers and cool, wet winters. It rarely freezes in the winter and it is rarely hot in the summer. Annual average rainfall is over 40 inches, with 80% of that falling from November through April. The average year-round temperature is 59ºF. Humidity averages 72 to 87 percent. Prevailing winds are from the north, and average 5 mph.
- **Governing Body Format**—The City of Smithburg 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 Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.

DEVELOPMENT TRENDS

In the yellow-highlighted text that says "Describe trends in general," provide a brief description of your jurisdiction's recent development trends similar to the following example:

> Anticipated development levels for Smithburg are low to moderate, consisting primarily of residential development. The majority of recent development has been infill. Residentially, there has been a focus on affordable housing and a push for more secondary mother-in-law units on properties. The City of Smithburg adopted its general plan in July 2000. The plan focuses on issues of the greatest concern to the community. City actions, such as those relating to land use allocations, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with the plan. Future growth and development in the City will be managed as identified in the general plan.

Complete the table titled "Recent and Expected Future Development Trends" to demonstrate the development that occurred during the past 5 years, including a description of any development which may be located within a hazard zone. Provide additional information on any anticipated development. Please note that we are specifically looking for development permits for new construction. If your jurisdiction does not have the ability to differentiate between permit types, please list the total number of permits and include a note or comment in the document indicating what you have provided.

If your jurisdiction does not have the ability to track the number of permits for each hazard area, please insert a qualitative description of where development has occurred.

STATUS OF PREVIOUS PLAN ACTIONS

Please note that this section only applies to jurisdictions that are conducting updates to previously approved hazard mitigation plans. If your jurisdiction has not previously participated in an approved plan, this section will not appear in your annex template.

All action items identified in prior mitigation planning efforts must be reconciled in this plan update. Action items must all be marked as ONE of the following; check the appropriate box (place an X) and provide the following information:

- **Completed—**If an action was completed during the performance period of the prior plan, please check the appropriate box and provide a date of completion in the comment section. If an action has been initiated and is an ongoing program (e.g. annual outreach event), you may mark it as completed and note that it is ongoing in the comments. When removing such actions from your action plan, please consider including them in the existing integration section above. If you have an action that addresses an ongoing program you would like to continue to include it in your action plan, please see the Carried Over to Plan Update section below.
- **Removed—**If action items are to be removed because they are no longer feasible, a reason must be given. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. Place a comment in the comment section explaining why the action is no longer feasible or barriers that prevented the action from being implemented (e.g., "Action no longer considered feasible due to lack of political support."). If the wording and/or intent of a previously identified action is unclear, this can be a reason for removal. A change in community priorities may also be a reason for removal and should be discussed in the comments.
- **Carried Over to Plan Update—**If an action is in progress, ongoing or has not been initiated and you would like to carry it over to the plan update, please check the "Check if Yes" column under "Carried Over to Plan Update." Selecting this option indicates that the action will be included in the mitigation action plan for the 2018 plan. If you are carrying over an action to the plan update, please include a

comment describing any action that has been taken or why action was not taken (specifically, any barriers or obstacles that prevented the action from moving forward or slowed progress) The last column "Enter Action #" will be addressed when you develop your actions plan in the following sections. You will need to revisit it after completing the updated action plan in phase 3.

Please ensure that you have provided a status and a comment for each action.

REVIEW AND INCORPORATION OF INFORMATION FOR THIS ANNEX

Please note that we will continue to add to the following sections through all phases of the annex development process.

Existing Reports, Plans, Regulatory Tools and Other Resources

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but please be sure to update and enhance any descriptions. This may seem trivial or unimportant, but it is a requirement to pass the state and FEMA review process.

Staff and Local Stakeholder Involvement in Annex Development

This section should describe in general terms the process by which the annex was developed. Please include general discussion ***with a focus on who was involved and how the action plan was developed***. An example is included below.

> This annex was developed over the course of several months with input from many city departments including public works, public safety, planning, budget and finance, and parks and recreation. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization. A action development meeting was held on February 20, 2018 and was attended by representatives from all previously listed department as well as the City Manager's office. Once actions had been identified and compiled in the annex, a draft was internally circulated for comment.

At this point in the annex development process, please include notes on any internal meetings/discussions so we can provide an accurate description of who was involved and how they were involved. The more detailed the notes, the better!

PHASE 2 INSTRUCTIONS

CAPABILITY ASSESSMENT

Jurisdiction Name has performed an inventory and analysis of existing capabilities, plans, programs and policies that enhance its ability to implement 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. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities is presented in Table 1-2.
- Development and permitting capabilities are 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.

- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-7.
- Classifications under various community mitigation programs are presented in Table 1-8.

The capability assessment was reviewed in order 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 and are identified as Community Capacity Building mitigation actions in the Analysis of Mitigation Actions table in Section 1.10.

Please note that it is unlikely that you will be able to complete all sections of the capability assessment on your own. You will likely need to reach out to other departments within your local government, such as planning, finance, public works, etc. It may be beneficial to provide these individuals with background information about this planning process, as you will want input from them again during Phase 3 of your annex development.

Legal and Regulatory Capability

In the table titled "Legal 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 are entering yes, please be sure that you are providing a comment with the appropriate code, ordinance or plan.***
- **Other Jurisdiction Authority**—Enter "Yes" if there are any regulations that may impact your jurisdiction that are enforced or administered by another agency (e.g., a state agency or special purpose district) or if you know that there are any state or federal regulations or laws that would prohibit local implementation of the identified item; otherwise, enter "No." ***Note: If you answer yes, please indicate the other agency in the comments.***
- **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 are entering yes, please be sure that you are providing a comment.***
- **Integration Opportunity**—Enter "Yes" if your jurisdiction has opportunities for integration of the code, ordinance or plan with the hazard mitigation plan. Consider entering "Yes" in the Integration Opportunity column if you answer "yes" to any of the following:

  - If you answered "Yes" in the Local Authority column for this code, ordinance or plan:

    - Does the code, ordinance or plan already address hazards and their potential impacts?
      - If so, should it be updated or revised to reflect new information about risk?
      - If not, will (or should) the code, ordinance or plan be updated over the performance period of the hazard mitigation plan (5 years)?
    - Does the code, ordinance or plan include specific projects that should be reviewed to incorporate hazard mitigation goals?
    - Does the code, ordinance or plan include specific projects that should be included as action items in the hazard mitigation action plan?

  - If you answered "No" in the Local Authority column for this code, ordinance or plan:

    - Will your jurisdiction develop the code, ordinance or plan during the performance period of the hazard mitigation plan?

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.
- 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 Capabilities

Complete the table titled "Development and Permitting Capabilities." Examples of qualitative descriptions of buildout in the jurisdiction are as follows:

- The Town is close to being built out. Most new projects involve the demolition of an existing residence and construction of a new replacement residence. A few subdivisions are processed each year.
- There are five parcels of underdeveloped land within the city limits. According to the General Plan, the total potential units for these parcels is 33 units.

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 eligibility for 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 in the right-hand column. If you have contract support staff with these capabilities, you can still answer "Yes." Indicate in the department column that this resource is provided through contract support.

Education and Outreach Capabilities

Complete the table titled "Education and Outreach" to indicate your jurisdiction's capabilities and existing efforts regarding natural hazard mitigation education and outreach.

National Flood Insurance Program Compliance

Complete the table titled "National Flood Insurance Program Compliance" by indicating your jurisdiction's capabilities related to each question in the table.

Classification in Hazard Mitigation Programs

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.

Tetra Tech has completed this table for classification programs that have classification information available online:

- **Community Rating System**— https://www.fema.gov/media-library/assets/documents/15846
- **Storm Ready**— https://www.weather.gov/stormready/communities
- **Firewise**— http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx

For two of the programs, we are not able to access information pertaining to your jurisdiction. If you are unfamiliar with the programs, please visit the websites below:

- **Building Code Effectiveness Grading Schedule (BCEGS)**— Idaho Survey and Rating Bureau- http://www.isrb.com/default.asp
- **Public Protection Classification**— Idaho Survey and Rating Bureau- http://www.isrb.com/default.asp

INTEGRATION WITH OTHER PLANNING INITIATIVES

The goal of plan integration is to ensure that the potential impact of hazards is considered in planning for future development. 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 goals and recommendations of the hazard mitigation plan, and those that offer opportunities for future integration. The simplest way to do this is to review the Legal and Regulatory Capabilities table to see which items were marked as "Yes" under the Integration Opportunity column.

Existing Integration

List items for which you entered "Yes" under the Integration Opportunity column of the "Legal 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 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 2030**—The general plan includes a "Safety, Services, and Infrastructure" 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 initiates that serve both adaptation and mitigation objectives. ***Note: Any plans that fall into this category should be reviewed during the development of the mitigation strategy in Phase 3 and included as appropriate.***

Opportunities for Future Integration

List any remaining items that say "Yes" in the Integration Opportunity column in the Legal and Regulatory Capabilities and explain the process by which integration will occur. Examples follow:

- **Zoning Code**—The City of Smithburg is conducting a comprehensive update to its zoning code. The opportunity to incorporate additional mitigation and abatement measures will be contemplated for inclusion 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**—Smithburg 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.

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. Please 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.

PHASE 3 INSTRUCTIONS

JURISDICTION-SPECIFIC NATURAL 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. Please refer to the table listing all Presidential Disaster Declarations for the County that is included in the toolkit you received at the workshop. We recommend including most large-scale disasters, unless you know that there were no impacts to 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, please refer to the NOAA storm events database included in the tool kit. 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:

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Other plans/documents that deal with emergency management (safety element of a comprehensive plan, emergency response plan, etc.)
- Resident input.

If you do not have estimates for dollars of damage caused, please list "Not Available" in the appropriate column or simply list a brief description of the damages (e.g. Main Street closed as a result of flooding, downed trees and residential damages). Please note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

HAZARD RISK RANKING

The risk ranking performed for the overall planning area is presented in the risk assessment section of the overall hazard mitigation plan. However, each jurisdiction has differing degrees of risk exposure and vulnerability and, therefore, needs to rank risk for its own area, using the same methodology as used for the overall planning area. The risk-ranking exercise assesses two variables for each hazard: its probability of occurrence; and its potential impact on people, property and the economy.

Tetra Tech has developed a draft risk ranking using the parameters outlined below and based in part on risk ranking in the previous plan (if applicable) for each planning partner. The results are in the "Loss Matrix" spreadsheet provided in the toolkit distributed at the workshop. If you agree with the results, then copy them from the spreadsheet into the risk ranking table in your annex. If the results differ from what you know based on substantiated data and documentation, you may alter the ranking based on this knowledge. If this is the case, please note this fact in your template and include what you believe the rank should be and why. 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 you believe it should be ranked as medium.

Also keep in mind that one of the purposes of this exercise is to support the selection and prioritization of actions in your plan. **You will need to have at least one true mitigation action for each hazard ranked as "high" or "medium."** This is discussed in more detail in the Hazard Mitigation Action Plan section of these instructions.

The instructions below describe the methodology for how these rankings were derived. Please review before providing any comments.

Risk Ranking Methodology

Review Risk Ranking in Template

Review the hazard risk ranking information that Tetra Tech has provided. The hazard with the highest risk rating is listed at the top of table titled "Hazard Risk Ranking" in your template 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 ratings were given the same rank. "High," Medium," and "Low" assignments were given for each hazard of concern based on the total score (probability x impact). It is important to note, that this is determined by the scores rather than assigning a certain number of hazards to each category.

When reviewing the risk ranking results, it is important to remember that this exercise is about categorizing hazards into broad levels of risk (e.g. high, medium, low). It is not an exercise in precision.

Review Risk Ranking in Loss Matrix

The following sections discuss the methodology used to develop the results included in your template. Please refer to the Loss Matrix provided in your tool kit in order to follow along.

Probability of Occurrence for Each Hazard

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—If there is no exposure to a hazard, there is 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 **purple 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:

Risk Rating = Probability Factor x 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.

JURISDICTION-SPECIFIC VULNERABILITIES

Repetitive Loss Properties

Please Note that Canyon County does not have any FEMA Identified Repetitive Loss Properties.

Other Vulnerabilities

We would strongly encourage you to review the results of the risk assessment included in the tool kit, your jurisdiction's natural events history, and any relevant public comments/input and develop a few sentences that discuss specific risks. You do not need to develop a sentence for every single parameter, but review the results and identify a few issues you would like to highlight. For example:

- Only about 2 percent of the jurisdiction's population is estimated to reside in the 1 percent annual chance flood hazard area; however, 45 percent of the population is estimated to reside 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 may produce nearly 1 million tons of structure debris.
- Over the past 10 years, the jurisdiction has experienced more than $6 million in estimated damages from severe storm events.
- More than 50 buildings are located in areas that will 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.

In addition, please list any noted vulnerabilities in your jurisdiction related to hazard mitigation that may not be apparent from the risk assessment and other information provided. This may include things such as the following:

- An urban drainage issue that results in localized flooding every time it rains.
- An area of the community that frequently loses power due to a lack of tree maintenance.
- A critical facility, such as a police station, that is not equipped with a generator.
- A neighborhood that has the potential to have ingress and egress cut off as the result of a hazard event, such as a flood or earthquake (e.g. bridge 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.

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 mitigation strategy. The items you list in this section should cross-walk back to the mitigation action that you have selected. Two examples are shown in the table below.

Noted Vulnerability	Example Mitigation Action
Only about 2 percent of the jurisdiction's population is estimated to reside in the 1 percent annual chance flood hazard area; however, 45 percent of the population is estimated to reside in the 0.2 percent annual chance flood hazard area where flood insurance is generally not required.	Develop and 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.
An urban drainage issue results in localized flooding every time it rains.	Replace undersized culverts that are contributing to localized flooding. Priority areas include: • The corner of Main Street and 1st Street • Old Oak subdivision.

HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

This section is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan. All of the work that you have done thus far should provide you with a plethora of ideas for actions. With this in mind, we recommend that you review the following and develop a list of potential actions:

Wording Your Action Descriptions:

Descriptions of your actions need not provide great detail. That will come when you apply for a project grant. Provide enough information to identify the project's scope and impact. The following are typical descriptions for an action plan action:

- **Action 1**—Address repetitive-loss properties. Through targeted mitigation, acquire, relocate or retrofit the five repetitive loss structures in the County as funding opportunities become available.
- **Action 2**—Perform a non-structural, seismic retrofit of City Hall.
- **Action 3**—Acquire floodplain property in the Smith subdivision.
- **Action 4**—Enhance the County flood warning capability by joining the NOAA "Storm Ready" program.

- **Capability Assessment Section of Annex**—Review the Legal and Regulatory Capability table, the Fiscal Capability table, the Administrative and Technical Capability table, the Education and Outreach table, and the Community Classification table.
  - For any capability that you indicated that you did not have, ask yourself – should we have this capability? If yes, consider including an action to develop/acquire the capability.
  - Example: Ensure a staff person from public works and planning are trained in the use of FEMA's benefit-cost analysis software.
  - Review the Legal and Regulatory capabilities. If any have not been reviewed and 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 (Note: actions such as this should also be identified in the opportunities for future integration section). Also, consider including projects or actions that have been identified in other plans and programs such as Capital Improvement Plans, Strategic Plans, etc. as actions in this plan.
  - For any capability that you indicated you do have, consider how this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.

- **National Flood Insurance Program Compliance Table of this Annex**—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 appropriate 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 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 don't participate in CRS or you would like to improve your classification, consider this as an action.
- If the number of flood insurance polices 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.

- **Adaptive Capacity for Climate Change Section of this Annex**—Consider your responses to this section. For those criterion 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 those criterion you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity. For those criterion 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).
- **Opportunities for Future Integration Section in this Annex**—Review the items you identified in this section. For those 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 _____. For other items listed in this section, consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated.
- **Jurisdiction-Specific Vulnerabilities Section in this Annex—**Review the items that you have identified in this section and consider actions that will help reduce these vulnerabilities (see mitigation best practices catalog).
- **Mitigation Best Practices Catalog**—A catalog that includes FEMA and other agency identified best practices, steering committee and other stakeholder recommendations was developed as part of the plan development process and included in your tool kit. Review the catalog and identify those actions that your jurisdiction should consider including in its action plan.
- **Public Input**—Review input received during the process, specifically the public survey results included in your toolkit.
- **Prior Mitigation Planning Efforts**—If your jurisdiction participated in a previous hazard mitigation plan, please be sure to remember to include any actions that were identified as "carry over" actions. Once you have carried them over, return to the Status of Previous Actions table and record the new action number (see discussion below).

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 the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) and Flood Mitigation Assistance (FMA) grants (see fact sheet provided in toolkit). If you have actions that are not HMGP, PDM or FMA grant eligible, but do mitigate part or all of the hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section.
- **You must identify at least one true mitigation action (i.e. not a preparedness or response action) that is clearly defined and actionable for hazards ranked as "high" or "medium."**

Recommended Actions

We recommend that every planning partner strongly consider the following actions. **The specifics of these actions should be adjusted as needed for the particulars of each community.** You will note that six of these actions have been prepopulated in your annex template. These six actions should be included in every annex and should not be removed.

1. 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.
2. Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.
3. Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan.
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:

    - Enforce the flood damage prevention ordinance.
    - Participate in floodplain identification and mapping updates.
    - Provide public assistance/information on floodplain requirements and impacts.

5. Identify and pursue strategies to increase adaptive capacity to climate change.
6. 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.
7. Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
8. Develop a post-disaster recovery plan and a debris management plan.
9. Develop and/or update plans that support or enhance continuity of operations following disasters.
10. Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

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 and description. Replace the "xxx" included in the template with the letter code for your jurisdiction as follows:

    - City of Caldwell—C1, C2, C3…
    - City of Nampa—NA1, NA2, NA3…
    - City of Melba—M1, M2, M3…
    - City of Middleton—MT1, MT2, MT3…
    - City of Parma—P1, P2, P3…
    - City of Greenleaf—GL1, GL2, GL3…
    - City of Notus—NO1, NO2, NO3…
    - City of Wilder—W1, W2, W3…
    - Canyon County—CC1, CC2, CC3…

- 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 the hazards, 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, please ensure that it is clear who the lead agency will be and list supporting agencies in the appropriate 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 funding sources for the cost share. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table below for project eligibility for FEMA's hazard mitigation assistance grant program.
- Indicate the time line as "short-term" (1 to 5 years) or "long-term" (5 years or greater) or "ongoing" (a continual program)

Eligible Activities	HMGP	PDM	FMA
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	√	√	
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	√	√	√

HMGP = Hazard Mitigation Grant Program; PDM = Pre-Disaster Mitigation; FMA = Flood Mitigation Assistance

* FEMA allows increasing the 5% Initiative amount up to 10% for a Presidential major disaster declaration under HMGP. 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.

Source: *https://www.fema.gov/hazard-mitigation-assistance-mitigation-activity-chart*

Prioritization of Mitigation Actions

Complete the information in the table titled "Mitigation Strategy Priority Schedule" as follows:

- **Action #**—Indicate the action number from the previous annex table (Hazard Mitigation Action Plan Matrix).
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter "High," "Medium" or "Low" 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.
- **Costs**—Enter "High," "Medium" or "Low" as follows:
  - High: Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed action.
  - Medium: Could budget for under existing work-plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
  - Low: Possible to fund under existing budget. Action is or can be part of an existing ongoing program.

- If you know the estimated cost of an action because it is part of an existing, ongoing program, indicate the amount.

- **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 HMGP, PDM and FMA and the table above.
- **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 are generally "wish-list" actions. They 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.

This prioritization is a simple way to determine that your identified actions meet one of the primary objectives of the Disaster Mitigation Act. It is not the detailed benefit/cost analysis required for HMGP/PDM /FMA action grants. The prioritization will identify any actions whose probable benefits will not exceed the probable costs. Those actions identified as high-priority grant funding 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.

Please see the example below based on the first three recommended actions listed on page 17.

Table 0-9. Mitigation Strategy Priority Schedule

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Action Grant-Eligible?	Can Action Be Funded Under Existing Programs/ Budgets?	Implementation Priority	Grant Pursuit Priority
EX-1	3	High	High	Yes	Yes	No	Medium	High
EX-2	7	Medium	Low	Yes	No	Yes	High	Low
EX-3	2	Low	Medium	No	No	Maybe	Low	Low

Analysis of Mitigation Actions

Complete the table titled "Analysis of Mitigation Actions" summarizing the mitigation actions by hazard of concern and the following eight mitigation types. Please note that an action can be more than one mitigation type:

- **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.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions.

Please see the example below based on some of the recommended actions listed on page 17, but please note that these recommendations are heavy on generalized actions on the prevention spectrum and light in other areas and specificity. Planning partners should aim to identify at least one action in each category (although this is not required) and should make sure there is at least one action to address "high" and "medium" ranked hazards:

Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type[a]				
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11
Drought	EX-2	EX-1	EX-4		
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11
Severe weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11

Hazard Type	Action Addressing Hazard, by Mitigation Type[a]				
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services
Wildland fire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11

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. Please note that 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. Please note that this section is optional.

MUNICIPAL ANNEX TEMPLATE

1. JURISDICTION NAME

1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

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

1.2 JURISDICTION PROFILE

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation**—
- **Current Population**—
- **Population Growth**—
- **Location and Description**—
- **Brief History**—
- **Climate**—
- **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 DEVELOPMENT TRENDS

_DESCRIBE TRENDS IN GENERAL__.

Table 1-1 summarizes development trends in the performance period since development of the previous hazard mitigation plan and expected future development trends.

Table 1-1. Recent and Expected Future Development Trends

Criterion	Response					
Has your jurisdiction annexed any land since the development of the previous hazard mitigation plan? • **If yes, give the estimated area annexed and estimated number of parcels or structures.**	Yes/No _____					
Is your jurisdiction expected to annex any areas during the performance period of this plan? • **If yes, please describe land areas and dominant uses.** • **If yes, who currently has permitting authority over these areas?**	Yes/No _____ _____					
Are any areas targeted for development or major redevelopment in the next five years? • **If yes, please briefly describe, including whether any of the areas are in known hazard risk areas**	Yes/No _____					
How many permits for new construction were issued in your jurisdiction since the development of the previous hazard mitigation plan?		**2011**	**2012**	**2013**	**2014**	**2015**
	Single Family	__	__	__	__	__
	Multi-Family	__	__	__	__	__
	Other (commercial, mixed use, etc.)	__	__	__	__	__
Please provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	• Special Flood Hazard Areas: # • Landslide: # • High Liquefaction Areas: # • Tsunami Inundation Area: # • Wildfire Risk Areas: #					
Please 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

Jurisdiction Name has performed an inventory and analysis of existing capabilities, plans, programs and policies that enhance its ability to implement 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. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities is presented in Table 1-2.
- Development and permitting capabilities are 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.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-7.
- Classifications under various community mitigation programs are presented in Table 1-8.

The capability assessment was reviewed in order 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 and are identified as Community Capacity Building mitigation actions in the Analysis of Mitigation Actions table in Section 1.10.

Table 1-2. Legal and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Zoning Code	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Subdivisions	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Stormwater Management	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Post-Disaster Recovery	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Real Estate Disclosure	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Growth Management	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Site Plan Review	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Environmental Protection	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Flood Damage Prevention	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Emergency Management	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Climate Change	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Other:	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Planning Documents				
General Plan	Yes/No	Yes/No	Yes/No	Yes/No
Is the plan compliant with Assembly Bill 2140? *Yes/No*				
Comment:				
Capital Improvement Plan	Yes/No	Yes/No	Yes/No	Yes/No
How often is the plan updated? _____				
Comment:				
Floodplain or Watershed Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Stormwater Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Urban Water Management Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Habitat Conservation Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Economic Development Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Shoreline Management Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Community Wildfire Protection Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Forest Management Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Climate Action Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Comprehensive Emergency Management Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Post-Disaster Recovery Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Continuity of Operations Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Public Health Plan	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				
Other:	Yes/No	Yes/No	Yes/No	Yes/No
Comment:				

Table 1-3. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? • **If no, who does? If yes, which department?**	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 1-4. 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	Yes/No- If yes, please specify
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 (if yes, please specify)

Table 1-5. Administrative and Technical Capability

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

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? • If yes, please briefly describe.	Yes/No Insert appropriate information
Do you utilize social media for hazard mitigation education and outreach? • If yes, please briefly describe.	Yes/No Insert appropriate information
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, please briefly describe.	Yes/No Insert appropriate information
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, please briefly describe.	Yes/No Insert appropriate information
Do you have any established warning systems for hazard events? • If yes, please briefly describe.	Yes/No Insert appropriate information

Table 1-7. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Insert appropriate information
Who is your floodplain administrator? (department/position)	Insert appropriate information
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?	Insert appropriate information
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets/Exceeds Insert appropriate information
When was the most recent Community Assistance Visit or Community Assistance Contact?	Insert appropriate information
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, please state what they are.	Yes/No Insert appropriate information
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If no, please state why.	Yes/No Insert appropriate information

Criterion	Response
Does your floodplain management staff need any assistance or training to support its floodplain management program? • **If so, what type of assistance/training is needed?**	Yes/No Insert appropriate information
Does your jurisdiction participate in the Community Rating System (CRS)? • **If yes, is your jurisdiction interested in improving CRS Classification?** • **Is your jurisdiction interested in joining the CRS program?**	Yes/No Yes/No Yes/No
How many flood insurance policies are in force in your jurisdiction?[a] • **What is the insurance in force?** • **What is the premium in force?**	Insert appropriate information $_____ $_____
How many total loss claims have been filed in your jurisdiction?[a] • **How many claims are still open/were closed without payment?** • **What were the total payments for losses?**	Insert appropriate information Insert appropriate information $_____

a. According to FEMA statistics as of MONTH XX, 201X

Table 1-8. Community Classifications

	Participating?	Classification	Date Classified
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

1.5 INTEGRATION WITH OTHER PLANNING INITIATIVES

The information on hazards, risk, vulnerability and mitigation contained in this hazard mitigation plan is based on the best available data. Plan integration is the incorporation of this information into other relevant planning mechanisms, such as general planning and capital facilities planning. It includes the integration of natural hazard information and mitigation policies, principles and actions into local planning mechanisms and vice versa. Additionally, plan integration is achieved though the involvement of key staff and community officials in collaboratively planning for hazard mitigation.

1.5.1 Existing Integration

In the performance period since adoption of the previous hazard mitigation plan, Jurisdiction Name made progress on integrating hazard mitigation goals, objectives and actions into other planning initiatives. The following plans and programs currently integrate components of the hazard mitigation strategy:

- **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
- **Plan or Program Name**—Description

Resources listed in Section 1.13 were used to provide information for this annex on hazard events and local capabilities within the jurisdiction.

1.5.2 Opportunities for Future Integration

As this hazard mitigation plan is implemented, Jurisdiction Name will use information from the plan as the best available science and data on natural hazards. The capability assessment presented in this annex identifies codes, plans and programs that provide opportunities for integration. The area-wide and local action plans developed for this hazard mitigation plan in actions related to plan integration, and progress on these actions will be reported through the progress reporting process described in Volume 1. New opportunities for integration also will be identified as part of the annual progress report. The capability assessment identified the following plans and programs that do not currently integrate goals or recommendations of the hazard mitigation plan 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
- **Plan or Program Name**—Description

1.6 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 1-10 lists past occurrences of natural hazards for which specific damage was recorded in Jurisdiction Name. Other hazard events that broadly affected the entire planning area, including Jurisdiction Name, 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 # (if applicable)	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	$_____

1.7 HAZARD RISK RANKING

Table 1-11 presents a local ranking for Jurisdiction Name of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 1-11. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	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

a. Based on the Big Lagoon Bald Mountain M7.9 scenario
b. Severe weather is assessed more qualitatively than other hazards. Assumptions for risk ranking include high probability, medium impact on people, low impact on property and low impact on economy.
c. Based on Very High and High Fire Severity Zones.
d. Based on 1 percent-annual-chance flood zone (otherwise known as the special flood hazard area)
e. Based on Very High and High Landslide Susceptibility Zones
f. Drought is assessed more qualitatively than other hazards. Generally, drought does not cause injury or death to people or result in property damage. Assumptions for risk ranking include high probability, no impact on people, low impact on property and medium impact on economy.
g. Based on the combined dam inundation areas of Copco No. 1, Iron Gate and Trinity dams.
h. Based on 4 feet of Sea Level Rise
i. Based on composite possible tsunami events

1.8 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 the jurisdiction.

1.8.1 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

1.8.2 Other Noted Vulnerabilities

The following 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 Section 1.10.

1.9 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	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Enter Action #
Insert Action Text ***Comment:***				Action#
Insert Action Text ***Comment:***				Action#
Insert Action Text ***Comment:***				Action#
Insert Action Text ***Comment:***				Action#
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Insert Action Text ***Comment:***				Action#

1.10 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 1-13 lists the actions that make up the Jurisdiction Name hazard mitigation action plan. 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

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #—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.							
Existing	Earthquake, flooding, landslide, tsunami, wildland fire	3, 4, 10	TBD	TBD	High	HMGP, PDM, FMA	Short-term
Action #— Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including _____							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, tsunami, wildland fire	1, 3, 4, 5, 7, 8, 10	TBD	TBD	Low	Staff Time, General Funds	Ongoing
Action #— Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, tsunami, wildland fire	1, 5, 8	TBD	TBD	Low	Staff Time, General Funds	Short-term
Action #—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.							
New and Existing	Dam failure, flooding, severe weather, tsunami, sea level rise	1, 3, 5, 7, 8, 10	TBD	TBD	Low	Staff Time, General Funds	Ongoing
Action #—Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following _____.							
New and Existing	TBD	1, 3, 4, 5, 6, 7, 8	TBD	TBD	Low	Staff Time, General Funds	Short-term
Action #— Purchase generators for critical facilities and infrastructure that lack adequate back-up power including _____.							
Existing	Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildland fire	2, 6, 9					
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							

Table 1-14. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]
TBD	3	High	High	Yes	Yes	No	Medium	High
TBD	7	Medium	Low	Yes	No	Yes	High	Low
TBD	3	Low	Low	Yes	No	Yes	High	Low
TBD	6	Medium	Low	Yes	No	Yes	High	Low
TBD	7	Medium	Low	Yes	No	Yes	High	Medium
TBD	3	High	Medium	Yes	Yes	No	Medium	High

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 and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Community Capacity Building
_____							
_____							
_____							
_____							
_____							
_____							
_____							
_____							
_____							

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

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

1.13 REVIEW AND INCORPORATION OF INFORMATION FOR THIS ANNEX

1.13.1 Existing Reports, Plans, Regulatory Tools and Other Resources

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

- **Jurisdiction Name Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Jurisdiction Name 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>
- **Technical Reports and Information—**The following **o**utside resources and references were reviewed:
  - **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.
  - <INSERT DOCUMENT AND DESCRIPTION OF HOW IT WAS USED>

1.13.2 Staff and Local Stakeholder Involvement in Annex Development

Insert discussion per instructions.

Tetra Tech Will Insert Jurisdiction-Specific Hazard Maps Prepared for This Plan

INSTRUCTIONS FOR DISTRICT ANNEX COMPLETION

INSTRUCTIONS FOR COMPLETING SPECIAL PURPOSE DISTRICT ANNEX TEMPLATE

The jurisdictional annex templates for the 2020 Canyon County Hazard Mitigation Plan update will be completed in three phases. **This document provides instructions for completing Phase 1 of the template for special purpose districts.**

The target timeline for phase completion is as follows:

- **Phase 1** – Jurisdictional profile
  - Deployed: December 13, 2019
  - Due: **January 31, 2020**
- **Phase 2** – Capability assessment
  - Deployed: February 18,2020
  - Due: **April 30, 2020**
- **Phase 3** – Risk ranking and action plan development
  - Deployed: June 23, 2020
  - Due: **July 31, 2020, COB**

Any questions on completing the template should be directed to:

Rob Flaner
Tetra Tech, Inc.
(208) 939-4391
E-mail: rob.flaner@tetratech.com

Special Purpose District Annex:

This document provides instructions for completing **Phase 1** of the jurisdictional annex template for special purpose districts. **Templates should be completed by April 20 ,2018.** Your completed template should be submitted to:

Rob Flaner
Tetra Tech, Inc.
(208) 939-4391
E-mail: rob.flaner@tetratech.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 within the yellow, highlighted text that is currently in the template, rather than creating text in another document and pasting it into the template. Text from another source will alter the style and formatting of the document.

The numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of this numbering.

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, etc.). Please do not change the chapter number. Revise only the jurisdiction name.

HAZARD MITIGATION PLAN POINT OF CONTACT

Please 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, please let the planning team know by inserting a comment into the document.

JURISDICTION PROFILE

Overview

Please provide a brief summary description of your jurisdiction. Please be sure to include:

- the purpose of the jurisdiction,
- the date of inception,
- the type of organization,
- the number of employees,
- the mode of operation (i.e., how operations are funded),
- a description of who the district's customers are,
- an overview of current service area trends, including an approximation of current users/subscribers,
- a summary description of previous growth trends in service area, and anticipated future increase/decrease in services (if applicable),
- an approximation of area served in square miles,
- a geographical decription of the service area, and
- the type of governing body, and who has adoptive authority.

Example Jurisdiction Narrative Profile:

The Johnsonville Community Services District is a special district created in 1952 to provide water and sewer service to the unincorporated area east of the City of Smithburg known as Johnsonville. The District's designated service area expanded throughout the years to include other unincorporated areas of Jones County: Creeks Corner, Jones Hill, Fields Landing, King Salmon, and Freshwater. 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. As of April 30, 2016, the District serves 7,305 water connections and 6,108 sewer connections, with a current staff of 21. Funding comes primarily through rates and revenue bonds.

Provide information similar to the example provided in the box above. This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document.

ASSETS

Please provide an approximate value for the noted areas within the table. Include the sum total value for identified assets for each section in the "Total" line for the section.

Property

Provide an approximate value for the land owned by the District.

Critical Infrastructure and Equipment

List types of equipment an infrastructure **owned by the District** that are used in times of emergency or, if incapacitated, has the potential to severely impact the service area. Provide an approximate **aggregate replacement value** for each type. For water and sewer, include mileage of pipeline under this category.

Critical Facilities

Please note that there is a place for you to provide an address (highlighted in pink) for any identified critical facilities that you have identified. This information is being requested so that we can develop the critical facility database that will be used for the risk assessment. This column will be deleted out of the document before public distribution and will not be included in the final plan. Please contact a member of the planning team if you have any questions or concerns about providing this information.

List types of district structures vital to maintain services to the designated service area. Provide an approximate **aggregate replacement value** for each line. The Steering Committee has decided upon the following definition of Critical Facilities for this planning process:

- A local (not state or federal) facility in either the public or private sector that is critical to the health and welfare of the population and that is especially important following hazard events, including but not limited to the following:
  - Structures or facilities that produce, use, or store 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 utilized as evacuation shelters
  - 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, hardware stores and emergency operation centers that are needed for response activities before, during and after a natural hazard event
  - Public and private utility facilities that are vital to maintaining and restoring normal services to damaged areas before, during and after natural hazard events.

Please use this definition as a guideline when selecting critical facilities the District owns.

SAMPLE COMPLETED TABLE – SPECIAL DISTRICT ASSETS

Asset	Value
Property	
11.5 Acres	$5,750,000
Critical Infrastructure and 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	
2 Administrative Buildings	$2,750,000
4 Pump Station Buildings	$377,000
Total:	**$3,127,000**

STATUS OF PREVIOUS PLAN ACTIONS

Please note that this section only applies to jurisdictions that are conducting updates to previously approved hazard mitigation plans. If your jurisdiction has not previously participated in an approved plan, this section will not appear in your annex template.

All action items identified in prior mitigation planning efforts must be reconciled in this plan update. Action items must all be marked as ONE of the following; check the appropriate box (place an X) and provide the following information:

- **Completed—**If an action was completed during the performance period of the prior plan, please check the appropriate box and provide a date of completion in the comment section. If an action has been initiated and is an ongoing program (e.g. annual outreach event), you may mark it as completed and note that it is ongoing in the comments. When removing such actions from your action plan, please consider including them in the existing integration section above. If you have an action that addresses an ongoing program you would like to continue to include it in your action plan, please see the Carried Over to Plan Update section below.
- **Removed—**If action items are to be removed because they are no longer feasible, a reason must be given. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. Place a comment in the comment section explaining why the action is no longer feasible or barriers that prevented the action from being implemented (e.g., "Action no longer considered feasible due to lack of political support."). If the wording and/or intent of a previously identified action is unclear, this can be a reason for removal. A change in community priorities may also be a reason for removal and should be discussed in the comments.
- **Carried Over to Plan Update—**If an action is in progress, ongoing or has not been initiated and you would like to carry it over to the plan update, please check the "Check if Yes" column under "Carried Over to Plan Update." Selecting this option indicates that the action will be included in the mitigation action plan for the 2018 plan. If you are carrying over an action to the plan update, please include a comment describing any action that has been taken or why action was not taken (specifically, any barriers or obstacles that prevented the action from moving forward or slowed progress) **The last column "Enter Action #" will be addressed when you develop your actions plan in the following sections. You will need to revisit it after completing the updated action plan in phase 3, but please just leave it as is from the time being.**

Please ensure that you have provided a status and a comment for each action.

REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

Please note that we will continue to add to the following sections through all phases of the annex development process.

Existing Reports, Plans, Regulatory Tools and Other Resources

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but please be sure to update and enhance any descriptions. This may seem trivial or unimportant, but it is a requirement to pass the state and FEMA review process.

Staff and Local Stakeholder Involvement in Annex Development

This section should describe in general terms the process by which the annex was developed. Please include general discussion ***with a focus on who was involved and how the action plan was developed***. An example is included below.

> This annex was developed over the course of several months with input from many district departments including operations, finance, and capital planning. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization. A action development meeting was held on February 20, 2018 and was attended by representatives from all previously listed department as well as the General Manager and representatives from the Board of Directors. Once actions had been identified and compiled in the annex, a draft was internally circulated for comment.

At this point in the annex development process, please include notes on any internal meetings/discussions so we can provide an accurate description of who was involved and how they were involved. The more detailed the notes, the better!

Phase 2 Instructions

CAPABILITY ASSESSMENT

Planning and Regulatory Capability

List any federal, state, local or district laws, ordinances, codes and policies that govern your jurisdiction that include elements related to hazard mitigation. List any other plans, studies or other documents that address hazard mitigation issues for your jurisdiction. Please provide the date of last update and any comments as appropriate. A few examples follow:

Plan, Study or Program	Date of Most Recent Update	Comment
District Design Standards	2010	
Capital Improvement Program	Updated and approved annually	covers 5 year timeframe
Emergency Operations Plan	2000	
Facility Maintenance Manual	1990	
State Building Code	2016	
Division of State Architects		Review and approval of all building and site design features is required prior to construction
Habitat Conservation Plan		All development impacting critical habitat must meet federal and state requirements pertaining to the protection of endangered species

Fiscal, Administrative and Technical 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 eligibility for 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 in the right-hand column. If you have contract support staff with these capabilities, you can still answer "Yes." Indicate in the department column that this resource is provided through contract support.

Education and Outreach Capabilities

Complete the table titled "Education and Outreach" to indicate your jurisdiction's capabilities and existing efforts regarding natural hazard mitigation education and outreach.

INTEGRATION WITH OTHER PLANNING INITIATIVES

The goal of plan integration is to ensure that the potential impact of hazards is considered in planning for future development. 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, identify all plans and programs that have already been integrated with the goals and recommendations of the hazard mitigation plan, and those that offer opportunities for future integration.

Existing Integration

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 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.

Opportunities for Future Integration

List any plans or program 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. Please 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.

REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

Please 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 template.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but please be sure to update and enhance any descriptions. This may seem trivial or unimportant, but it is a requirement to pass the state and FEMA review process.

PHASE 3 INSTRUCTIONS

JURISDICTION-SPECIFIC NATURAL 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. Please refer to the table listing all Presidential Disaster Declarations for the County that is included in the toolkit you received at the workshop. We recommend including most large-scale disasters, unless you know that there were no impacts to 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, please refer to the NOAA storm events database included in the tool kit. We recommend conducting a search for the name of your jurisdiction or those jurisdictions in your service area in order to identify events with known impacts. Other potential sources of damage information include:

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Other plans/documents that deal with emergency management (safety element of a comprehensive plan, emergency response plan, etc.)
- Resident input.

If you do not have estimates for dollars of damage caused, please list "Not Available" in the appropriate column or simply list a brief description of the damages (e.g. Power out to 35,000 customers for 24 hours). Please note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

HAZARD RISK RANKING

The risk ranking performed for the overall planning area is presented in the risk assessment section of the overall hazard mitigation plan. However, each jurisdiction has differing degrees of risk exposure and vulnerability and, therefore, needs to rank risk for its own area, using the same methodology as used for the overall planning area. The risk-ranking exercise assesses two variables for each hazard: its probability of occurrence; and its potential impact on people, property and the economy.

Tetra Tech has developed a draft risk ranking using the parameters outlined below and based in part on risk ranking in the previous plan (if applicable) for each planning partner. The results are in the "Loss Matrix" spreadsheet provided in the toolkit distributed at the workshop. If you agree with the results, then copy them from the spreadsheet into the risk ranking table in your annex. If the results differ from what you know based on substantiated data and documentation, you may alter the ranking based on this knowledge. If this is the case, please note this fact in your template and include what you believe the rank should be and why. For example, drought was ranked as low; however, the jurisdiction is a water supply district, so you believe it should be ranked as high.

Also keep in mind that one of the purposes of this exercise is to support the selection and prioritization of actions in your plan. **You will need to have at least one true mitigation action for each hazard ranked as "high" or "medium."** This is discussed in more detail in the Hazard Mitigation Action Plan section of these instructions.

The instructions below describe the methodology for how these rankings were derived. Please review before providing any comments.

Risk Ranking Methodology

Review Risk Ranking in Template

Review the hazard risk ranking information that Tetra Tech has provided. The hazard with the highest risk rating is listed at the top of table titled "Hazard Risk Ranking" in your template 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 ratings were given the same rank. "High," Medium," and "Low" assignments were given for each hazard of concern based on the total score (probability x impact). It is important to note, that this is determined by the scores rather than assigning a certain number of hazards to each category.

When reviewing the risk ranking results, it is important to remember that this exercise is about categorizing hazards into broad levels of risk (e.g. high, medium, low). It is not an exercise in precision.

Review Risk Ranking in Loss Matrix

The following sections discuss the methodology used to develop the results included in your template. Please refer to the risk assessment results provided for more information.

Probability of Occurrence for Each Hazard

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—If there is no exposure to a hazard, there is 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*** in your service area 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 ***district assets exposed*** to the hazard event:

  - High—25 percent or more of the total replacement value of assets is exposed to a hazard (Impact Factor = 3)
  - Medium—10 percent to 24 percent of the total replacement value of assets is exposed to a hazard (Impact Factor = 2)
  - Low—9 percent or less of the total replacement value of assets is exposed to the hazard (Impact Factor = 1)
  - No impact—None of the total replacement value is exposed to a hazard (Impact Factor = 0)

- **Operations**—Impact on operations is assessed based on estimates of how long it will take your jurisdiction to become 100-percent operable after a hazard event. The estimated functional downtime for critical facilities has been subjectively assigned an impact as follows:

  - High—Functional downtime of 365 days or more (Impact Factor = 3)
  - Medium—Functional downtime of 180 to 364 days (Impact Factor = 2)
  - Low—Functional downtime of 180 days or less (Impact Factor = 1)
  - No impact—No functional downtime is estimated from the hazard (Impact Factor = 0).

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:

Risk Rating = Probability Factor x 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.

JURISDICTION-SPECIFIC VULNERABILITIES

We would strongly encourage you to review the results of the risk assessment included in the tool kit, your jurisdiction's natural events history, and any relevant public comments/input and develop a few sentences that discuss specific risks. You do not need to develop a sentence for every single parameter, but review the results and identify a few issues you would like to highlight. For example:

- One of the District's wastewater treatment plants is located in an area likely to be permanently inundated by sea level rise by 2030.
- Three of the District's five fire stations are located in very high landslide risk areas.
- The vast majority of the service area for the district is located on high liquefaction potential soils, which has the potential to severely disrupt service for an extended period following even a moderate earthquake event.
- The District headquarters is more likely than not to be extensively damaged during a Smithburg fault M7.0 event.

In addition, please list any noted vulnerabilities in your jurisdiction related to hazard mitigation that may not be apparent from the risk assessment and other information provided. This may include things such as the following:

- An area of the community that frequently loses power due to a lack of tree maintenance.
- A critical facility, such as a police station, that is not equipped with a generator.
- A neighborhood that has the potential to have ingress and egress cut off as the result of a hazard event, such as a flood or earthquake (e.g. bridge only access).

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 mitigation strategy. The items you list in this section should cross-walk back to the mitigation action that you have selected. Two examples are shown in the table below.

Noted Vulnerability	Example Mitigation Action
One of the District's wastewater treatment plants is located in an area likely to be permanently inundated by sea level rise by 2030.	Conduct a detailed assessment of the wastewater treatment plant vulnerability to sea level rise. Determine adaptation actions that can be implemented in the near- and long-term.
A critical facility, such as a police station, is not equipped with a generator.	Unsure all critical facilities within the District have backup power generation capabilities. Priority facilities include: • Main street pump station • Old Oak subdivision pump station.

HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

This section is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan. All of the work that you have done thus far should provide you with a plethora of ideas for actions. With this in mind, we recommend that you review the following and develop a list of potential actions:

- **Capability Assessment Section of Annex—**Review the Planning and Regulatory Capability table, the Fiscal Capability table, the Administrative and Technical Capability table, and the Education and Outreach table.
  - ➢ For any capability that you indicated that you did not have, ask yourself – should we have this capability? If yes, consider including an action to develop/acquire the capability.
  - ➢ Example: Ensure a staff person is trained in the use of FEMA's benefit-cost analysis software.
  - ➢ Review the Legal and Regulatory capabilities. If you have not reviewed and updated a capability 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 (Note: actions such as this should also be identified in the opportunities for future integration section). Also, consider including projects or actions that have been identified in other plans and programs such as Capital Improvement Plans, Strategic Plans, etc. as actions in this plan.

Wording Your Action Descriptions:

Descriptions of your actions need not provide great detail. That will come when you apply for a project grant. Provide enough information to identify the action's scope and impact. The following are typical descriptions for an action plan action:

- **Action 1—**Address repetitive-loss issues. Through targeted mitigation, acquire, relocate or retrofit the nine pump stations that have been repetitively damaged.
- **Action 2—**Perform a non-structural, seismic retrofit of the administrative building.
- **Action 3—**Develop a schedule to underground overhead powerlines.

  - For any capability that you indicated you do have, consider how this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.

- **Adaptive Capacity for Climate Change Section of this Annex**—Consider your responses to this section. For those criterion 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 those criterion you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity. For those criterion that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices).
- **Opportunities for Future Integration Section in this Annex**—Review the items you identified in this section. Consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated.
- **Jurisdiction-Specific Vulnerabilities Section in this Annex—**Review the items that you have identified in this section and consider actions that will help reduce these vulnerabilities (see mitigation best practices catalog).
- **Mitigation Best Practices Catalog**—A catalog that includes FEMA and other agency identified best practices, steering committee and other stakeholder recommendations was developed as part of the plan development process and included in your tool kit. Review the catalog and identify those actions that your jurisdiction should consider including in its action plan.
- **Public Input**—Review input received during the process, specifically the public survey results included in your toolkit.
- **Prior Mitigation Planning Efforts**—If your jurisdiction participated in a previous hazard mitigation plan, please be sure to remember to include any actions that were identified as "carry over" actions. Once you have carried them over, return to the Status of Previous Actions table and record the new action number (see discussion below).

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 the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) and Flood Mitigation Assistance (FMA) grants (see fact sheet provided in toolkit). If you have actions that are not HMGP, PDM or FMA grant eligible, but do mitigate part or all of the hazard and may be eligible for other grant programs sponsored by other agencies, include them in this section.
- **You must identify at least one true mitigation action (i.e. not a preparedness or response action) that is clearly defined and actionable for hazards ranked as "high" or medium."**

Recommended Actions

We recommend that every planning partner strongly consider the following actions. **The specifics of these actions should be adjusted as needed for the particulars of each jurisdiction.** You will note that three of these actions have been prepopulated in your annex template. These three actions should be included in every annex and should not be removed.

1. Where appropriate, support retrofitting, 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 areas.
2. Integrate the hazard mitigation plan into other plans, ordinances and programs within the community.
3. Actively participate in the plan maintenance protocols outlined in Volume I of the hazard mitigation plan.

4. 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.
5. Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
6. Develop a post-disaster recovery plan and a debris management plan.
7. Develop and/or update plans that support or enhance continuity of operations following disasters.
8. Identify and pursue strategies to increase adaptive capacity to climate change.
9. Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

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 and description. Replace the "xxx" included in the template with the letter code for your district as follows:
  - Flood Contol District #1—FCD11-1, FCD11-2, FCD11-3…
  - Golden Gate Highway District—GG1, GG1, GG3…
  - Canyon County Ambulance District—CCAD1, CCAD2, CCAD3…
  - Wilder Rural Fire District—WRFD1, WRFD2, WRFD3…
  - Middleton Fire District—MFD1, MFD2, MFD3…
  - Nampa School District—NSD1, NSD2, NSD3…
- 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.
- 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, please ensure that it is clear who the lead agency will be and list supporting agencies in the appropriate 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 funding sources for the cost share. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table below for project eligibility for FEMA's hazard mitigation assistance grant program.
- Indicate the time line as "short-term" (1 to 5 years) or "long-term" (5 years or greater) or ongoing (a continual program)

Eligible Activities	HMGP	PDM	FMA
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	√	√	
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	√	√	√

HMGP = Hazard Mitigation Grant Program; PDM = Pre-Disaster Mitigation; FMA = Flood Mitigation Assistance

* FEMA allows increasing the 5% Initiative amount up to 10% for a Presidential major disaster declaration under HMGP. 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.

Source: https://www.fema.gov/hazard-mitigation-assistance-mitigation-activity-chart

Prioritization of Mitigation Actions

Complete the information in the table titled "Mitigation Strategy Priority Schedule" as follows:

- **Action #**—Indicate the action number from the previous annex table (Hazard Mitigation Action Plan Matrix).
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter "High," "Medium" or "Low" 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.

- **Costs**—Enter "High," "Medium" or "Low" as follows:

  - High: Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed action.
  - Medium: Could budget for under existing work-plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
  - Low: Possible to fund under existing budget. Action is or can be part of an existing ongoing program.

  If you know the estimated cost of a action because it is part of an existing, ongoing program, indicate the amount.

- **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 HMGP, PDM and FMA.
- **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 are generally "wish-list" actions. They 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.

This prioritization is a simple way to determine that your identified actions meet one of the primary objectives of the Disaster Mitigation Act. It is not the detailed benefit/cost analysis required for HMGP/PDM /FMA action grants. The prioritization will identify any actions whose probable benefits will not exceed the probable costs. Those actions identified as high-priority grant funding 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 indicting so should be inserted and a rationale should be provided.

Please see the example below based on the first three recommended actions listed on page 14.

Table 0-9. Mitigation Strategy Priority Schedule

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Action Grant-Eligible?	Can Action Be Funded Under Existing Programs/ Budgets?	Implementation Priority	Grant Pursuit Priority
EX-1	3	High	High	Yes	Yes	No	Medium	High
EX-2	7	Medium	Low	Yes	No	Yes	High	Low
EX-3	2	Low	Medium	No	No	Maybe	Low	Low

Analysis of Mitigation Actions

Complete the table titled "Analysis of Mitigation Actions" summarizing the mitigation actions by hazard of concern and the following eight mitigation types. Please note that an action can be more than one mitigation type:

- **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.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions.

Please see the example below based on some of the recommended actions listed on page 14, but please note that these recommendations are heavy on generalized actions on the prevention spectrum and light in other areas and specificity. Planning partners should aim to identify at least one action in each category (although this is not required) and should make sure there is at least one action to address "high" and "medium" ranked hazards:

Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type[a]					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects
Dam Failure	EX-2, 3, 4, 5	EX-1	EX-4		EX-7	
Drought	EX-2	EX-1	EX-4			
Earthquake	EX-2, 3, 4, 5	EX-1	EX-4		EX-7	
Flood	EX-2, 3, 4, 5	EX-1	EX-4		EX-7	
Landslide	EX-2, 3, 4, 5	EX-1	EX-4		EX-7	
Severe weather	EX-2, 3, 4, 5	EX-1	EX-4		EX-6, 7	
Wildland fire	EX-2, 3, 4, 5	EX-1	EX-4		EX-7	

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. Please note that 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. Please note that this section is optional.

DISTRICT ANNEX TEMPLATE

1. DISTRICT NAME

1.1 HAZARD MITIGATION PLAN POINT OF CONTACT

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

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.

For fire districts please be sure to include the following sentence (Non-fire Special Purpose Districts may 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 and Trends

The district serves a population of _ population_. Its service area covers an area of _area_.

Insert summary description of service trends.

1.2.3 Assets

Table 1-1 summarizes the critical assets of the district and their value.

Table 1-1. Special Purpose District Assets

Asset	Value
Property	
**number** **acres of land**	$_value_
Critical Infrastructure and Equipment	
**description**	$_value_
**description**	$_value_
**description**	$_value_
**description**	$_value_
**description**	$_value_
Total:	***$_value_***
Critical Facilities	
**description**	$_value_
**description**	$_value_
**description**	$_value_
**description**	$_value_
**description**	$_value_
**description**	$_value_
Total:	***$_value_***

1.3 CAPABILITY ASSESSMENT

Upon completion, the capability assessment was 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 and are identified as Community Capacity Building mitigation actions in the Analysis of Mitigation Actions table in Section 1.9.

1.3.1 Planning and Regulatory Capabilities

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions. Table 1-2 summarizes existing codes, ordinances, policies, programs or plans that are applicable to this hazard mitigation plan.

Table 1-2. Planning and Regulatory Capability

	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	_____	_____

1.3.2 Fiscal, Administrative and Technical Capabilities

Fiscal capability is an indicator of a jurisdiction's ability to fulfill the financial needs associated with hazard mitigation projects. An assessment of fiscal capabilities is presented in Table 1-3. Administrative and technical

capabilities represent a jurisdiction's staffing resources for carrying out the mitigation strategy. An assessment of administrative and technical capabilities is presented in Table 1-4.

Table 1-3. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
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
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Federal Grant Programs	Yes/No
Other	Yes/No (if yes, please specify)

Table 1-4. Administrative and Technical Capability

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

1.3.3 Education and Outreach Capabilities

Outreach and education capability identifies the connection between government and community members, which opens a dialogue needed for a more resilient community. An assessment of education and outreach capabilities is presented in Table 1-5.

Table 1-5. Education and Outreach

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? • If yes, please briefly describe	Yes/No Insert appropriate information
Do you utilize social media for hazard mitigation education and outreach? • If yes, please briefly describe	Yes/No Insert appropriate information

Criterion	Response
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • **If yes, please briefly specify**	Yes/No Insert appropriate information
Do you have any other programs already in place that could be used to communicate hazard-related information? • **If yes, please briefly describe**	Yes/No Insert appropriate information
Do you have any established warning systems for hazard events? • **If yes, please briefly describe**	Yes/No Insert appropriate information

1.3.4 Adaptive Capacity for Climate Change

Given the uncertainties associated with how hazard risk may change with a changing climate, a jurisdiction's ability to track such changes and adapt as needed is an important component of the mitigation strategy. Table 1-6 summarizes the District's adaptive capacity for climate change.

Table 1-6. Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating[a]
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts	High/Medium/Low
Comment:	
Jurisdiction-level monitoring of climate change impacts	High/Medium/Low
Comment:	
Technical resources to assess proposed strategies for feasibility and externalities	High/Medium/Low
Comment:	
Jurisdiction-level capacity for development of greenhouse gas emissions inventory	High/Medium/Low
Comment:	
Capital planning and land use decisions informed by potential climate impacts	High/Medium/Low
Comment:	
Participation in regional groups addressing climate risks	High/Medium/Low
Comment:	
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes	High/Medium/Low
Comment:	
Identified strategies for greenhouse gas mitigation efforts	High/Medium/Low
Comment:	
Identified strategies for adaptation to impacts	High/Medium/Low
Comment:	
Champions for climate action in local government departments	High/Medium/Low
Comment:	
Political support for implementing climate change adaptation strategies	High/Medium/Low
Comment:	
Financial resources devoted to climate change adaptation	High/Medium/Low
Comment:	
Local authority over sectors likely to be negative impacted	High/Medium/Low
Comment:	

Criterion	Jurisdiction Rating[a]
Public Capacity	
Local residents knowledge of and understanding of climate risk	High/Medium/Low
Comment:	
Local residents support of adaptation efforts	High/Medium/Low
Comment:	
Local residents' capacity to adapt to climate impacts	High/Medium/Low
Comment:	
Local economy current capacity to adapt to climate impacts	High/Medium/Low
Comment:	
Local ecosystems capacity to adapt to climate impacts	High/Medium/Low
Comment:	

a. High = Capacity exists and is in use; Medium = Capacity may exist, but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.

1.4 INTEGRATION WITH OTHER PLANNING INITIATIVES

The information on hazards, risk, vulnerability and mitigation contained in this hazard mitigation plan is based on the best available data. Plan integration is the incorporation of this information into other relevant planning mechanisms, such as general planning and capital facilities planning. It includes the integration of natural hazard information and mitigation policies, principles and actions into local planning mechanisms and vice versa. Additionally, plan integration is achieved though the involvement of key staff and community officials in collaboratively planning for hazard mitigation.

1.4.1 Existing Integration

In the performance period since adoption of the previous hazard mitigation plan, District Name made progress on integrating hazard mitigation goals, objectives and actions into other planning initiatives. The following plans and programs currently integrate components of the hazard mitigation strategy:

- **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

Resources listed in Section 1.12 were used to provide information on hazard events and local capabilities within the jurisdiction.

1.4.2 Opportunities for Future Integration

As this hazard mitigation plan is implemented, District Name will use information from the plan as the best available science and data on natural hazards. The capability assessment presented in this annex identifies codes, plans and programs that provide opportunities for integration. The area-wide and local action plans developed for this hazard mitigation plan include actions related to plan integration, and progress on these actions will be reported through the progress reporting process described in Volume 1. New opportunities for integration also will be identified as part of the annual progress report. The capability assessment identified the following plans and programs that do not currently integrate goals or recommendations of the hazard mitigation plan 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

1.5 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

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

Table 1-7. Natural Hazard Events

Type of Event	FEMA Disaster # (if applicable)	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 HAZARD RISK RANKING

Table 1-8 presents a local ranking for District Name of all hazards of concern for which Volume 1 of this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. 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 action development targets those hazards with high and medium rankings.

Table 1-8. Hazard Risk Ranking

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	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

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
7	_____	_____	High/Medium/Low
8	_____	_____	High/Medium/Low
9	_____	_____	High/Medium/Low

a. Based on the Big Lagoon Bald Mountain M7.9 scenario
b. Severe weather is assessed more qualitatively than other hazards. Assumptions for risk ranking include high probability, medium impact on people, low impact on property and low impact on economy.
c. Based on Very High and High Fire Severity Zones.
d. Based on 1 percent-annual-chance flood zone (otherwise known as the special flood hazard area)
e. Based on Very High and High Landslide Susceptibility Zones
f. Drought is assessed more qualitatively than other hazards. Generally, drought does not cause injury or death to people or result in property damage. Assumptions for risk ranking include high probability, no impact on people, low impact on property and medium impact on economy.
g. Based on the combined dam inundation areas of Copco No. 1, Iron Gate and Trinity dams.
h. Based on 4 feet of Sea Level Rise
i. Based on composite possible tsunami events

1.7 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 the jurisdiction. The following 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 Section 1.9.

1.8 STATUS OF PREVIOUS PLAN ACTIONS

Table 1-9 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 1-9. Status of Previous Plan Actions

Action Item	Completed	Removed; No Longer Feasible	Carried Over to Plan Update: Check if Yes	Carried Over to Plan Update: Enter Action #
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#

Action Item	Completed	Removed; No Longer Feasible	Carried Over to Plan Update: Check if Yes	Carried Over to Plan Update: Enter Action #
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				
Insert Action Text				Action#
Comment:				

1.9 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 1-10 lists the actions that make up the District Name hazard mitigation action plan. Table 1-11 identifies the priority for each action. Table 1-12 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-10. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #—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.							
Existing	Earthquake, flooding, landslide, tsunami, wildland fire	3, 4, 10	TBD	TBD	High	HMGP, PDM, FMA	Short-term
Action #—Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.							
New and Existing	Dam failure, drought, earthquake, flooding, landslide, severe weather, tsunami, wildland fire	1, 5, 8	TBD	TBD	Low	Staff Time, General Funds	Short-term
Action #—Purchase generators for critical facilities and infrastructure that lack adequate back-up power including _____.							
Existing	Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildland fire	2, 6, 9	TBD		Medium	HMGP, PDM	Short-term

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							
Action #—Description							

Table 1-11. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]
TBD	3	High	High	Yes	Yes	No	Medium	High
TBD	3	Low	Low	Yes	No	Yes	High	Low
TBD	3	High	Medium	Yes	Yes	No	Medium	High

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority[a]	Grant Pursuit Priority[a]

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

Table 1-12. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type[a]							
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
_____								
_____								
_____								
_____								
_____								
_____								
_____								
_____								
_____								

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

1.10 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

1.11 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section

1.12 REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

1.12.1 Existing Reports, Plans, Regulatory Tools and Other Resources

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>
- **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.

1.12.2 Staff and Local Stakeholder Involvement in Annex Development

Insert discussion per instructions.