

CHAPTER 5. CITY OF GARDEN CITY ANNEX

5.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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5.2. JURISDICTION PROFILE

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

- **Date of Incorporation**—May 22, 1949
- **Current Population**—12,500 as of 2011
- **Population Growth**—Approximately 3.04% annual growth $((25,753/11,459)^{1/10} - 1 \times 100)$ From the growth projection as established in “Communities in Motion 2035”
- **Location and Description**—Garden City is nestled between Boise, Meridian and Eagle lining the north and south banks of the Boise River. City elevations range from 2,550 feet to 2,698 feet, with an average of 2,620.9 feet. Garden City spans over the townships, sections and ranges; 3N2E05 to 06, 4N1E14, 4N1E23 to 26, 4N1E36, 4N2E19, and 4N2E30 to 32.
- **Brief History**—The history of Garden City is tied to the Boise River that runs the length of the city. Native Americans camped on the riverbanks. The higher ground, known as “Government Island,” was first a temporary military camp and later used by the U.S. Cavalry for pastures. The river often flooded the entire city area to the bench and deposited silt that created the rich agricultural soil.

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

Prior to 1949, the area was unincorporated Ada County land. Developers had a vision for duplex housing and filed a subdivision with 50- by 150-foot lots along Chinden and 100- by 300-foot commercial lots. The streets were numbered in a different direction to distinguish the area from Boise.

The “Village of Garden City” was incorporated in 1949 for the sole purpose of maintaining gambling. The “original town site” encompassed 100 acres, including the area from 32nd to 37th streets. Gambling precedes made Garden City a boomtown. Gambling provided funding for sewer, water, and street lighting. Gambling was outlawed by the state Legislature in 1953, and Garden City was expected to go away. Boise coveted Garden City’s liquor license

revenues and there were several attempts at dis-incorporation. But in 1967, the village was chartered as a city.

- **Climate**—Garden City has an average temperature of 52.0°F and an receives an average of 12.19 inches of annual precipitation since 1865 . Summers are typically warm to hot and dry averaging 71.9°F for June, July and August since 1865. Winters are generally cold and dry with occasional snow showers averaging 32.5°F for December, January and February since 1865. Spring and Fall are both mild with light precipitation averaging 51.0°F for March, April and May and 52.3°F for September, October and November since 1865.
- **Governing Body Format**—Garden City is governed by a Mayor and four City Council members. There is a Planning and Zoning Commission, Library Board, and Design Review Committee with certain decision making abilities. Recommending bodies include the Parks and Waterways Committee and Arts Commission.
- **Development Trends**—Garden City has an enviable location. It is adjacent to the Boise River, is linked with major transportation corridors, and is close to downtown Boise, the commercial center of the Treasure Valley. While there is very little property available for green field development, many properties are under-utilized and ideal for infill development. As the valley continues to spread out and vehicle commuting becomes more difficult, and as trends continue to favor more compact development with a mix of uses, Garden City will continue to become even more desirable. Considering these factors, Garden City provides a market for redevelopment of older and under-utilized properties.

Garden City has a diverse range of land uses. Residential uses occupy thirty-two percent (32%) of the land within the city. Commercial, office and industrial uses are twenty percent (20%). The city also includes or surrounds 258 acres of land owned and used by other public agencies, including Expo Idaho, Idaho Transportation Department and the Ada County Highway District.

The city has developed with different land-use patterns. The original Old Town site was developed in a standard grid, parallel to the river and in lots of 7,500 square feet and 30,000 square feet. Much of this original part of the city is zoned for commercial and multi-family development. The original reason for much of the commercially zoned land was for the location of mobile homes. This eastern part of the city has a mix of land uses. In much of the commercial zone, residential, commercial and industrial uses are adjacent or across the street from one another. This mixed-use character provides an opportunity to create a live-and-work environment. Recent development in the western portion of the city and near the river reflects a suburban character with curvilinear streets and cul-de-sacs. The city has significant capacity for in-fill development, both on vacant parcels and under-utilized properties. Commercial and industrial land uses are scattered throughout the community with a concentration of retail uses along major streets. Overall, the scale of commercial uses is typically low-intensity in a one or two-story development pattern.

Like most cities in the county, Garden City at one time turned its back on the river. The river frontage was an industrial area, and in Garden City these uses included stock yards, animal processing, warehouses, maintenance yards and storage areas. This trend is changing. With the success of residential housing along the west end of the river frontage, the river is being re-discovered and the old industrial uses are disappearing from the river frontage in the eastern side of town.

5.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 5-1 lists all past occurrences of natural hazards in the county. Repetitive loss records are as follows:

- Number of FEMA Identified Repetitive Flood Loss Properties: None
- Number of Repetitive Flood Loss Properties that have been mitigated: None

5.4. HAZARD RISK RANKING

Table 5-2 presents the ranking of the hazards of concern.

5.5. CAPABILITY ASSESSMENT

The assessment of the jurisdiction’s legal and regulatory capabilities is presented in Table 5-3. The assessment of the jurisdiction’s administrative and technical capabilities is presented in Table 5-4. The assessment of the jurisdiction’s fiscal capabilities is presented in Table 5-5. Classifications under various community mitigation programs are presented in Table 5-6.

5.6. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 5-7 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 5-8 identifies the priority for each initiative. Table 5-9 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

5.7. STATUS OF PREVIOUS PLAN INITIATIVES

Table 5-10 summarizes the current status of initiatives that were adopted by the County for the previous hazard plan. Those that are directly carried over as actions in this hazard plan are also indicated as such in Table 5-7.

5.8. FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Most of Garden City is within close proximity to the Boise River. The City currently utilizes the FEMA Flood Insurance Rate Maps to delineate the floodplain. A recent in depth analysis of very limited scope (from Veteran’s Memorial Parkway to the eastern borders of the City) has identified that the area that is very likely to flood in an event is contrary to the FIRM map designations. Inaccuracy of the floodplain maps is a major threat to the City in that many of the homes were not built to standards as required by the floodplain code, nor do they carry floodplain insurance as the best available data does not show the homes as in the 100 year floodplain. However, the City has been able to pinpoint the locations where the water is most likely to leave the river. This helps the City in two ways. First, in the event of a flood, we will have fairly accurate data as to where we may need to place sandbags or other flood proofing devices. Second, we have identified an adjacent park as a location that can be engineered to take water at known locations to reduce the effect of flooding in developed properties. A similar analysis of the entire City that pinpoints areas where water is likely to leave the Boise River and locations that could be procured and engineered to reduce flood loss could result products that would greatly reduce flood loss.

Additional data is needed on the following hazards to have a better understanding on risk within the planning area:

- Earthquake—NEHRP soils data as well as USGS “shake maps” for scenario events most likely to impact the planning area.
- Landslide—Soils data for landslide susceptibility Analysis.

- Wildfire—Enhanced wildfire mapping that will better support risk ranking and the measurement of risk reduction activities. Mapping similar to California’s Fire and Resource Assessment Program (FRAP).

5.9. HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps for the City of Garden City are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes.

Type of Event	Date	Preliminary Damage Assessment
High Winds (56 mph)	Nov 2010	Unknown
High Winds (68 mph)	Aug 2010	Unknown
High Winds (59 mph)	June 2010	Unknown
High Winds (49 mph)	May 2010	Unknown
High Winds (54 mph)	Oct 2009	Unknown
High Winds (51 mph)	Feb 2009	Unknown
High Winds (56 mph)	Sept 2007	Unknown
Severe Storm	July 2002	Unknown
High Winds (63 mph)	Dec 2000	Unknown
Severe Storm	Jan 1999	Unknown
Severe Storm	Sept 1998	\$38,000.00
Flood	May-June 1998	Unknown
Severe Storm	Apr 1998	\$20,000.00
Flood	Sept 1997	\$57,000.00
Flood	Mar-July 1997	\$50,000,000.00
Flood	Jan 1997	\$65,000,000.00
Flood	May 1996	\$5,000.00
Lightning	July 1995	\$5,000.00
Severe Storm	Apr 1995	\$50,000.00
Severe Storm	Dec 1994	\$1,150.00
Earthquake (5.0)	June 1994	Unknown
Flood	May 1993	Unknown
Winter Weather	Nov 1992	\$9,800.00
High Winds	Oct 1992	\$6,250.00
Flood	Aug 1992	\$4,545.00
High Winds (49 mph)	May 1992	Unknown
High Winds (49 mph)	May 1991	Unknown

**TABLE 5-1.
NATURAL HAZARD EVENTS**

Type of Event	Date	Preliminary Damage Assessment
Drought	1987-1992	\$500,000,000.00
Severe Storm	Dec 1988	\$8,700.00
High Winds (71 mph)	July 1987	\$10,000.00
Flood	Feb 1986	\$20,000.00+
High Winds (59 mph)	Jan 1986	Unknown
Earthquake (7.3)	Oct 1983	\$4,000,000.00
Flood	June 1983	\$146,900.00
High Winds (59 mph)	Apr 1983	Unknown
Flood	Feb 1982	Unknown
High Winds (59 mph)	June 1981	\$50,000.00
High Winds (58 mph)	Mar 1981	\$36,000.00
Volcano Ash	May 1980	Unknown
Flood	Jan 1979	\$50,000.00
Earthquake (4.5)	Nov 1977	Unknown
Flood	May 1973	Unknown
Flood	Jan 1971	Unknown

**TABLE 5-2.
HAZARD RISK RANKING**

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Flood	(3x18)=54
2	Severe Storm	(3x12)=36
3	Dam Failure	(1x18)=18
3	Earthquake	(2x9)=18
4	Landslide	(1x9)=9
4	Wildfire	(1x9)=9
5	Drought	(3x1)=3
5	Volcano	(1x3)=3

TABLE 5-3. LEGAL AND REGULATORY CAPABILITY					
	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinances & Requirements					
Building Code	Yes	Yes	No	No	Title 7 of Garden City Code
Zonings	Yes	Yes	No	No	Title 8 of Garden City Code
Subdivisions	Yes	Yes	Yes	No	Title 8-5 of Garden City Code
Stormwater Management	Yes	Yes	Yes	Yes	Garden City complies with the requirements as per EPA requirements in NPDES, and Idaho Department of Water Resources (IDWR) requirements
Post Disaster Recovery	Yes	Yes	Yes	No	Garden City participates in regional planning for mitigation, preparation and recovery through Ada County City Emergency Management (ACCEM)
Real Estate Disclosure	Yes	Yes	No	No	This is part of the Floodplain management are required to remain in compliance with FEMA requirements
Growth Management	Yes	No	Yes	No	Garden City creates and maintains a Comprehensive Plan to manage growth. This plan does take other jurisdictions that may be impacted by Garden City growth into consideration
Site Plan Review	Yes	No	No	No	Garden City conducts a Site Plan review to ensure compliance with City regulations and codes
Special Purpose (flood management, critical areas)	Yes	Yes	No	No	There are several special purpose jurisdictions that are concerned with the state of Garden City, these include the local drainage and irrigation companies, (Fairview Acres Drainage, Davis Drain, Settlers Irrigation, Warm Springs Canal, and Dry Creek Canal) as well as ACHD, wildlife preservations areas (Idaho Fish and Game) and wetland preservation (Idaho Bureau of Reclamation)

**TABLE 5-3.
LEGAL AND REGULATORY CAPABILITY**

	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Garden City creates and maintains a Comprehensive Plan.
Floodplain or Basin Plan	No	No	No	No	Note: once complete, the Ada County All Hazards Mitigation Plan-update will become the floodplain management plan of record for all communities within the planning area that participate in the CRS program.
Stormwater Plan	Yes	Yes	Yes	Yes	Garden City complies with the requirements as per EPA requirements in NPDES
Capital Improvement Plan	Yes	No	No	No	Garden City has a Capital Improvement Plan that ensures infrastructure is being maintained and replaced to maintain optimal performance
Habitat Conservation Plan	No	Yes	Yes	Yes	Under Title 36 of the Idaho State Statues Garden City defers to Idaho Fish and Game to ensure wildlife preservations and wetland preservation areas
Economic Development Plan	Yes	Yes	Yes	No	Garden City has established a Capital Improvement, and is also incorporated in the Boise Valley Economic Plan
Emergency Response Plan	Yes	No	Yes	No	ACCEM Ada County Flood Response Plan. Adopted: January, 2006 Ada County Mass Casualty Incident Plan. Adopted: 12/16/2010 Ada County HAZMAT Response Plan. Adopted: April 2011 Ada County Wildfire Response Plan. Adopted: May 2010
Shoreline Management Plan	No	No	No	No	
Post Disaster Recovery Plan	No	No	No	No	

**TABLE 5-4.
ADMINISTRATIVE AND TECHNICAL CAPABILITY**

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Public Works/Garden City/Development Service Planning Staff
Engineers or professionals trained in building or infrastructure construction practices	Yes	Public Works/Garden City/Development Service Building Staff
Planners or engineers with an understanding of natural hazards	Yes	Public Works/Garden City/Director Public Works/Garden City/Engineer Public Works/Garden City/Development Service Staff ACCEM/Director
Staff with training in benefit/cost analysis	No	
Floodplain manager	Yes	Public Works/Garden City/Development Service Administrator
Surveyors	Yes	Public Works/Garden City/Engineer
Personnel skilled or trained in GIS applications	Yes	Development Services/Garden City/GIS Administrator
Scientist familiar with natural hazards in local area	Yes	ACCEM/Ada County/Director of ACCEM
Emergency manager	Yes	Public Works/Garden City/GIS Administrator
Grant writers	No	

**TABLE 5-5.
FISCAL CAPABILITY**

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

TABLE 5-6. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	Yes	9	2008
Building Code Effectiveness Grading Schedule	Yes		
Public Protection			
Storm Ready	Yes	Blue	N/A
Firewise	No	N/A	N/A

TABLE 5-7. HAZARD MITIGATION ACTION PLAN MATRIX							
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
Initiative # GC1—Update and training on Emergency Action Plan							
New and Existing	All Hazards	O-1, O-2, O-5, O-6, O-7, O-8, O-9, O-10	ACCEM, Garden City	Low	Ada County, Garden City, Boise, Eagle, Kuna, Meridian, Star, State of Idaho	Short Term	No
Initiative # GC2—Establish emergency preparedness inventory with inspection and replacement plan							
New and Existing	All hazards	O-1, O-5, O-9, O-10	Garden City	Medium	Garden City, Corps of Engineers, USDA FNS, EMPG, PDM, FMA	Long Term	No
Initiative # GC3—Develop/update a Capital Improvement Plan for capital facilities/infrastructure within the City.							
New	Dam Failure, Flooding, Earthquakes, Landslide, Severe Weather	O-1, O-2, O-3, O-10	Garden City	Medium	Garden City	Long Term	No
Initiative # GC4—Installation of manhole locking mechanisms in the floodway							
Existing	Dam Failure, Flooding, Severe Weather	O-1, O-3, O-9, O-10	Garden City	Medium	Garden City, Buffer Zone Protection Program, DHS, FMA	Long Term	No
Initiative # GC5—Fresh water supply well house security camera installation.							
Existing	Dam Failure, Drought, Flooding, Earthquakes, Landslide, Severe Weather	O-3, O-9, O-10	Garden City	Medium	Garden City, Buffer Zone Protection Program, DHS	Long Term	No

**TABLE 5-7.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
Initiative # GC6—Garden City Parks security camera installation							
Existing	Dam Failure, Drought, Flooding, Earthquakes, Landslide, Severe Weather, Volcano Ash	O-3, O-9, O-10	Garden City	Medium	Garden City	Short Term	No
Initiative # GC7—Streetlight replacement/conversion to alternative energy streetlights							
Existing	All hazards	O-3, O-9, O-10	Garden City	Low	Garden City, USDA (CFDA 10.859), U.S. Dept. of Energy	Long Term	No
Initiative # GC8—Acquisition of vulnerable property within the floodplain for use as parks to mitigate flood waters							
Existing	Dam Failure, Flooding, Severe Weather	O-2, O-4, O-5, O-6, O-9	Garden City	High	Ada County, State of Idaho, Garden City, NRCS CTA, FWS, Corps of Engineers, RTCA, EPA, NFIP RFC, FEMA Severe Repetitive Loss Program Pilot Program, FMA, USDA Cooperative River Basin Program, EWP	Long Term	No
Initiative #GC9—Purchase of equipment to aid in recovery from a flood event for the Library							
Existing	Dam Failure, Flooding, Severe Weather	O-1	Garden City	High	Garden City, Corps of Engineers/ FPMSP, FMA	Short Term	No

**TABLE 5-7.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
Initiative #GC10-- Maintain community’s compliance and good standing under the National Flood Insurance program							
New and Existing	Dam Failure, Flooding, Severe Weather	O-2, O-4, O-5, O-6, O-9	Garden City	Low	Ada County, State of Idaho, Garden City	Short Term, Ongoing	Yes 8.1.g
Initiative #GC11-- Obtain portable generators for use in Ada County during power outages and other emergency situations							
New and Existing	All Hazards	O-1, O-2, O-5, O-6, O-7, O-8, O-9, O-10	ACCEN, Garden City	Medium	Garden City, EMPG	Long Term	No
Initiative #GC12— Continue to maintain/enhance the City’s classification under the Community Rating System							
New and Existing	Flood	2, 3, 4, 6, 8, 9	Garden City	Low	General Fund	Short/ Ongoing	No
Initiative #GC13— Integrate Local Hazard Mitigation Plan into the Garden City Comprehensive Plan.							
New and Existing	All Hazards	2,5,6	Garden City Planning and Zoning	Low	Garden City General Fund	Long term	No
Initiative #GC14— Where appropriate, support retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with properties with exposure to repetitive losses as a priority.							
Existing	All Hazards	3,8,9	ACCEN, Garden City	High	HMGP, ICC	Long Term	No

**TABLE 5-7.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	Included in Previous Plan?
Initiative #GC15 —Consider appropriate higher regulatory standards that prevent or reduce risk to the built environment from the known hazards of concern.							
New and Existing	All hazards	4, 6	Planning and Zoning	Low	Garden City	Short Term	No
Initiative #GC16 —Support County-wide initiatives identified in Volume 1.							
New and Existing	All Hazards	All	Garden City ACCEM	Low	Garden City	Short term Ongoing	No
Initiative #GC17 —Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.							
New & Existing	All Hazards	All	ACCEM, Garden City	Low	Garden City, FEMA Mitigation Grant Funding for 5-year update	Short-Term, Ongoing	No
Funding Source Abbreviations: CFDA—Catalog of Federal Domestic Assistance DHS—Department of Homeland Security EMPG—Emergency Management Performance Grant EPA—Environmental Protection Agency EWP—Emergency Watershed Protection FEMA—Federal Emergency Management Agency FMA—Flood Mitigation Assistance FMA—USDA Flood Mitigation Assistance FPMSP—Floodplain Management Services Program FWS—Fish & Wildlife Service HMGP—Hazard Mitigation Grant Program ICC—International Code Council NFIP RFC—National Flood Insurance Program Repetitive Flood Claims NRCS CTA—Natural Resource Conservation Service Conservation Technical Assistance PDM—Pre-Disaster Mitigation grant program RTCA—Rivers, Trails and Conservation Assistance USDA FNS—U.S. Department of Agriculture Food & Nutrition Service							

**TABLE 5-8.
MITIGATION STRATEGY PRIORITY SCHEDULE**

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority ^a
GC1	7	High	Low	Yes	No	Yes	High
GC2	7	High	Medium	Yes	Yes	Yes	High
GC3	7	High	Medium	Yes	Yes	Yes	High
GC4	3	High	Medium	Yes	Yes	No	Medium
GC5	6	Medium	Medium	Yes	Yes	No	Medium
GC6	6	Low	Medium	No	No	No	Low
GC7	7	Low	Low	Yes	Yes	No	Medium
GC8	3	High	High	Yes	Yes	No	Medium
GC9	3	Low	High	No	Yes	No	Low
GC10	5	Medium	Low	Yes	No	Yes	High
GC11	8	Medium	Medium	Yes	Yes	No	Medium
GC12	6	Medium	Low	Yes	No	Yes	High
GC13	3	High	Low	Yes	No	Yes	High
GC14	3	High	High	Yes	Yes	No	Medium
GC15	2	High	Low	Yes	No	Yes	High
GC16	10	High	Low	Yes	Yes	Yes	High
GC17	10	High	Low	Yes	Yes	Yes	High

a. See Section 1.3 for definitions of high, medium and low priorities.

**TABLE 5-9.
ANALYSIS OF MITIGATION INITIATIVES**

Hazard Type	Initiative Addressing Hazard, by Mitigation Type					
	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Dam Failure	GC1, GC2, GC3, GC4, GC7, GC8, GC12, GC13, GC17	GC1, GC2, GC4, GC5, GC6, GC9, GC12, GC14	GC1, GC8, GC12, GC16	GC1, GC2, GC8, GC12, GC13	GC1, GC2, GC11, GC12, GC16	GC4, GC8, GC12
Drought	GC1, GC2, GC3, GC7, GC13, GC17	GC1, GC2, GC4, GC5, GC14	GC1, GC16	GC1, GC2, GC13	GC1, GC2, GC11, GC16	
Flooding	GC1, GC2, GC3, GC4, GC7, GC8, GC10, GC12, GC13, GC17	GC1, GC2, GC5, GC6, GC9, GC10, GC12, GC14	GC1, GC8, GC10, GC12, GC16	GC1, GC2, GC8, GC12, GC13	GC1, GC2, GC11, GC12, GC16	GC4, GC8, GC12
Earthquakes	GC1, GC2, GC3, GC7, GC13, GC17	GC1, GC2, GC5, GC6, GC14	GC1, GC16	GC1, GC2, GC13	GC1, GC2, GC11, GC16	
Landslide	GC1, GC2, GC3, GC7, GC13, GC17	GC1, GC2, GC5, GC6, GC14	GC1, GC16	GC1, GC2, GC13	GC1, GC2, GC11, GC16	
Severe Weather	GC1, GC2, GC3, GC4, GC7, GC8, GC13, GC17	GC1, GC2, GC4, GC5, GC6, GC9, GC14	GC1, GC8, GC16	GC1, GC2, GC8, GC13	GC1, GC2, GC11, GC16	GC4, GC8
Volcano Ash	GC1, GC2, GC3, GC7, GC13, GC17	GC1, GC2, GC6, GC14	GC1, GC16	GC1, GC2, GC13	GC1, GC2, GC11, GC16	

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.

**TABLE 5-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
8.1.a		X		This is now addressed by Objective #8
8.1.b		X		This is now addressed by Objective #6.
8.1.c		X		This is now addressed by Objective #5.
8.1.d		X		This is now addressed by Objective #2
8.1.e		X		This is now addressed by Objective #6.
8.1.f		X		This is now addressed by Objective #5.
8.1.g		X		This is now addressed by action item AC 6
8.1.h			X	This action does not apply to the County.
8.1.i		X		This action will be carried over for review by planning and development services and its purpose and function is now addressed by Objectives 5 and 6
8.1.j			X	This action is now addressed by plan maintenance strategy found in Chapter 7.
8.1.k	X			ACCEM and Red Cross coordinate these functions.
8.2.a			X	Red Cross Shelter sites are not owned by the County.
8.2.c	X			All Ada County residents are encouraged to own NOAA radios as part of their personal all hazard preparedness. This information is included in all public presentations, the website and appears periodically in an electronic newsletter.
8.2.d		X		This is now addressed by Objective #2
8.2.e	X			The revised format of the plan update provides for measurable actions that can be recommended and implemented at an individual jurisdiction or district level.
8.2.f		X		This is now addressed by Objective #10
8.1.e		X		This is now addressed by Objective #6.
8.2.g		X		The process of risk evaluation is ongoing as is the creation of mitigation strategies based on the most recent data. This objective was written with multiple actions that may not all be implemented at once. Its concept and purpose are now covered by Objectives 2,3,4,5 and 6.
8.2.h			X	(Well Intakes) This infrastructure is not County property; it will be addressed in the appropriate jurisdictional annex.

**TABLE 5-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
8.2.i				This action is now covered by Objective 3
8.2.j			X	More modern early warning systems are being investigated that will capitalize on current available technologies.
8.3.a		X		This is now addressed by Objective #2
8.3.b		X		This is now addressed by Objective #2
8.3.c		X		This is now addressed by Objective #2
8.3.d		X		The statement contains more than one action. The multiple actions that are contained are now addressed by Objectives 2 and 10
8.3.e			X	This action will be addressed in the appropriate jurisdictional annex (ACHD)
8.3.f		X		This is now addressed by Objective #7
8.3.g			X	This action will be addressed in the appropriate jurisdictional annex (ACHD)
8.4.h			X	This action will be addressed in the appropriate jurisdictional annex (ACHD)
8.4.j			X	Action is currently not viable. Requires Irrigation District Planning Partners
8.4.k			X	This action will be addressed in the appropriate jurisdictional annex (ACHD)
8.4.a			X	Generators will be incorporated into larger projects that improve resiliency. These types of improvements are now addressed by Objectives 1 and 10
8.4.b			X	This action will be addressed in the appropriate jurisdictional annex (Kuna)
8.4.c	X			Completed—ACHD has placed Opticom on traffic signals for First Responders to control signals. Each City has an evacuation plan along with the contra-flow plan.
8.4.d		X		This is now addressed by Objective #10
8.4.e			X	This is a basic service provided by ACHD and does not need to be addressed in the Mitigation Plan
Fire Mitigation Activities				
5.1.a		X		Ongoing activity that is now addressed by Objective 6.
5.1.b		X		This is now addressed by Objective #6

**TABLE 5-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
5.1.c		X		This is now addressed by Objective #6
5.1.d	X			Ordinance # 760 bans fireworks in the threatened areas of the unincorporated County.
5.2.a			X	Wildfire Steering Committee is now comprised solely of jurisdictions with direct involvement in firefighting activities.
5.2.b		X		Ongoing activity that is now addressed by Objective 8.
5.2.c			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.2.d			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.2.e			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.2.f			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.2.g			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.2.h			X	This activity will be addressed in the City of Boise annex.
5.2.i		X		Evacuation plans are complete. Public outreach is ongoing and is now addressed by Objective 8.
5.2.j			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.2.k			X	This activity will be addressed in the annexes of appropriate fire jurisdictions.
5.3.a		X		This activity is now addressed by Objective 7.
5.3.b		X		This activity is now addressed by Objective 9.
5.3.c		X		This activity is now addressed by Objective 9.
5.3.d		X		This is an ongoing activity regulated by County Ordinance #769.
5.3.e		X		This is an ongoing activity that involves multiple jurisdictions and districts. Its purpose and intent are now addressed by Objectives 5 and 9.
5.3.f			X	This activity is a response action and will be addressed by the jurisdictions in Emergency Operations Plans.
5.3.g		X		This activity is now addressed by Objective 5.

**TABLE 5-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
5.3.h			X	This activity will be addressed in the ACHD annex.
5.4.a		X		This activity is now addressed by Objective 5.
5.4.b		X		This activity is now addressed by Objectives 8 and 9.
5.4.c		X		This activity is now addressed by Objectives 8 and 9.
5.4.d			X	This activity will be addressed in the annex of appropriate fire jurisdiction.
5.4.e			X	This activity will be addressed in the annex of appropriate fire jurisdiction.
5.4.f			X	This activity will be addressed in the annex of appropriate fire jurisdiction.
5.4.g			X	This activity will be addressed in the annex of appropriate fire jurisdiction.
5.4.h			X	This activity will be addressed in the annex of appropriate fire jurisdiction.
5.4.i			X	This activity will be addressed in the annex of appropriate jurisdiction.
5.4.j			X	This activity will be addressed in the annex of appropriate jurisdiction.
5.4.k			X	This activity is being removed from the Mitigation Plan as it is a direct function of the Interoperable Communications Initiatives being funded through IBHS.
5.4.l			X	This activity is being removed from the Mitigation Plan as it is a direct function of the Interoperable Communications Initiatives being funded through IBHS.
5.4.m			X	This activity will be addressed by the policies of the fire jurisdictions that have volunteer staff.
5.4.n		X		ACCEM coordinates with all local response agencies to create multi-year training plans. Training funds are available through ACCEM or directly through IBHS depending on the scope.
5.5.a		X		This activity is now addressed by Objective 5.
5.5.b		X		This activity is now addressed by Objectives 5 and 9.
5.5.c		X		This activity is now addressed by Objective 8.

**TABLE 5-10.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
5.5.d		X		This activity is now addressed by Objective 5.
5.5.e		X		This activity is now addressed by Objective 9.
5.5.f			X	This is a program that will be implemented by the Bureau of Land Management on an as needed basis.
5.5.g			X	This is a program that will be implemented by the Bureau of Land Management on an as needed basis.
5.5.h		X		This activity is now addressed by Objective 9.

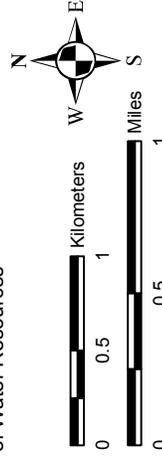
GARDEN CITY

FIGURE X - X

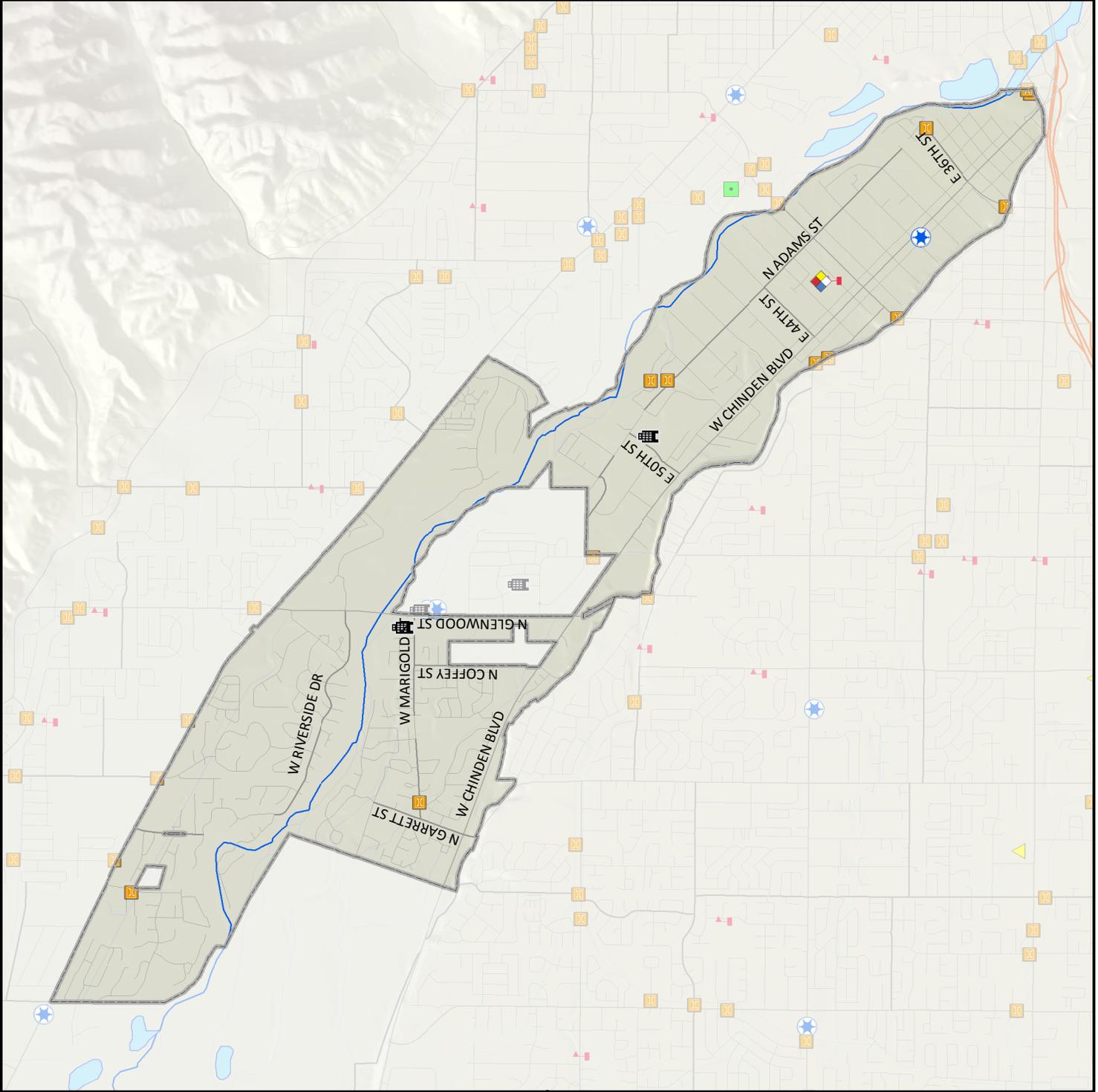
Critical Facilities

- Critical Facilities**
- Bridge
 - Communication
 - Dam
 - Government
 - Hazmat
 - Hospital
 - Power
 - Protective
 - School
 - Wastewater
 - Other

Data Sources:
Ada County
Base Data: Ada County, Idaho Department
of Water Resources



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FIGURE X - X

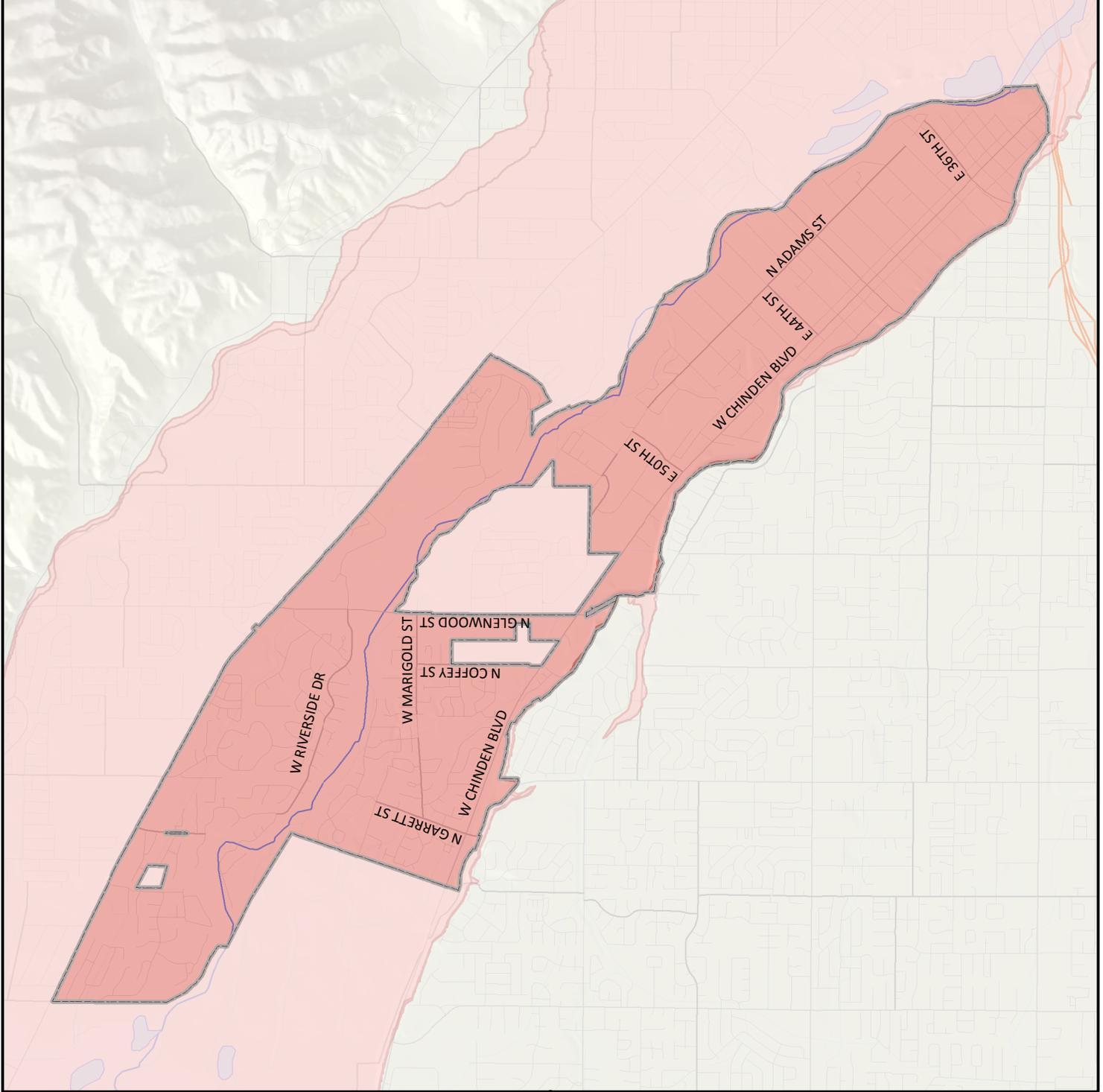
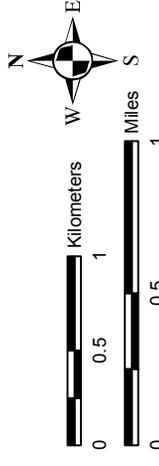
Lucky Peak Dam Failure

Maximum Pool Inundation Area

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

This map has been compiled using the best information available and is believed to be accurate, however, its preparation required many assumptions. Actual conditions during a failure may vary from those assumed, so the accuracy cannot be guaranteed. The limits of flooding shown and the temporal data should only be used as a guideline for emergency planning and response actions. Actual areas inundated and inundation timing will depend on specific flooding and failure conditions and may differ from the areas shown on the maps.

Data Sources: US Army Corps of Engineers
Base Data: Ada County, Idaho Department of Water Resources



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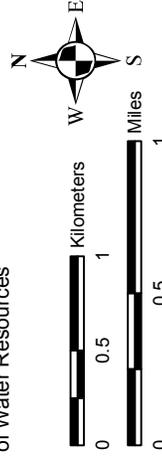
FIGURE X - X

Peak Ground Acceleration
USGS 100 Year
Probabilistic Event

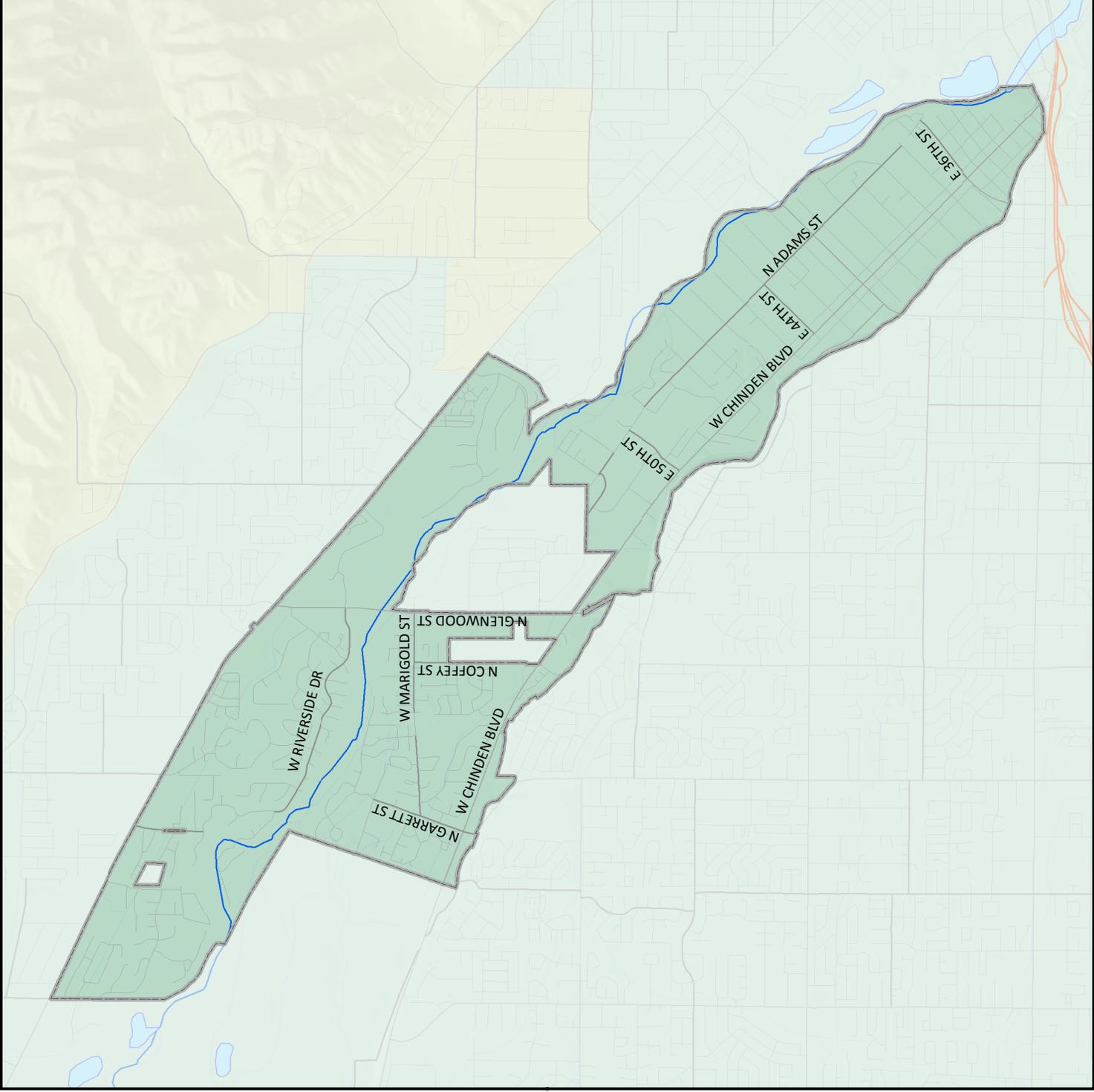
Mercalli Scale, Potential Damage

- IV, None
- V, Very Light
- VI, Light
- VII, Moderate
- VIII, Moderate to Heavy

Data Sources: HAZUS-MH MR4 Output,
US Geological Survey
Base Data: Ada County, Idaho Department
of Water Resources



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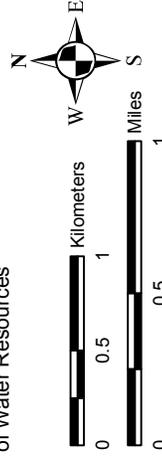
FIGURE X - X

Peak Ground Acceleration
USGS 500 Year
Probabilistic Event

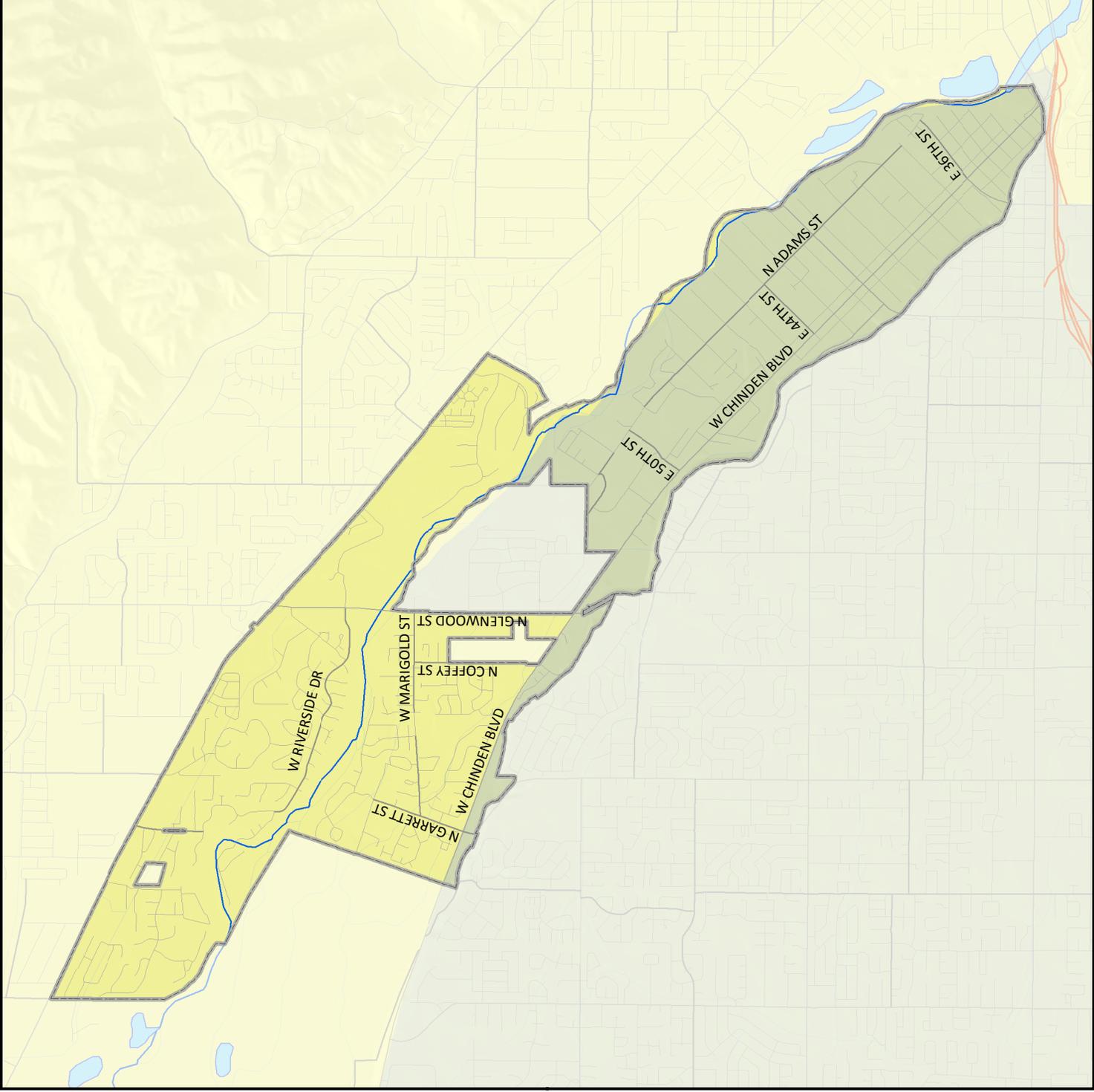
Mercalli Scale, Potential Damage

-  IV, None
-  V, Very Light
-  VI, Light
-  VII, Moderate
-  VIII, Moderate to Heavy

Data Sources: HAZUS-MH MR4 Output,
US Geological Survey
Base Data: Ada County, Idaho Department
of Water Resources



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FIGURE X - X

Squaw Creek Fault Peak Ground Acceleration Magnitude 7.1 Scenario

Mercalli Scale, Potential Damage



VI, Light



VII, Moderate

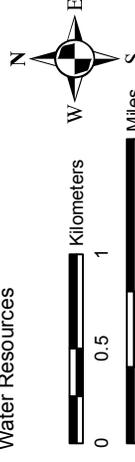
Magnitude: 7.1
Depth: 16.0km
Epicenter: N44.0927 W116.356
Approx. 40km N of Boise, ID

The most important of these is the Squaw Creek fault, about 40 km from Boise (see Field Trip Stop 5 and 7). Last movement on the Squaw Creek fault was post-7000 years (Gilbert and others, 1983). This fault is assigned a maximum credible earthquake (MCE) of magnitude 7.0 at an epicentral distance of 5 km and a focal depth of 7 km (Gilbert and others, 1983). An intensity of VIII is expected in Boise from this MCE (Zollweg, 2006).

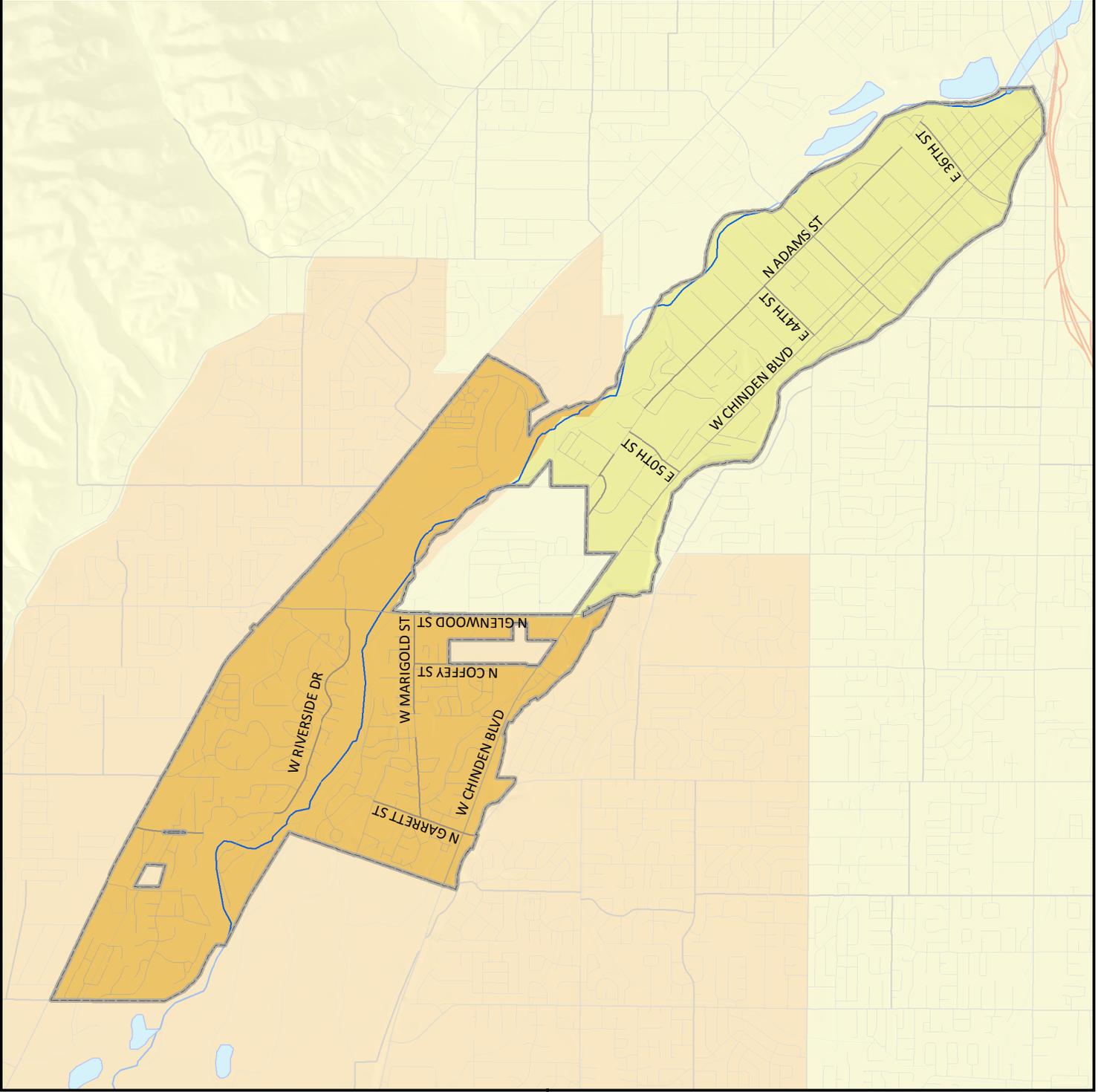
This information provided by:

"Field Trip Guide to the Natural Hazards of the Boise Area, Idaho" January 2007, William M. Phillips, Geologist, Idaho Geologic Survey

Data Sources: United States Geological Survey
Base Data: Ada County, Idaho Department of Water Resources



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FIGURE X - X

Flood Studies: Idaho Department of Water Resources & US Army Corps of Engineers

Flood Zones



Idaho Department of
Water Resources Eagle Island
100 Year Flood Study



US Army Corps of Engineers
Boise River Flood Study
(100 Year)



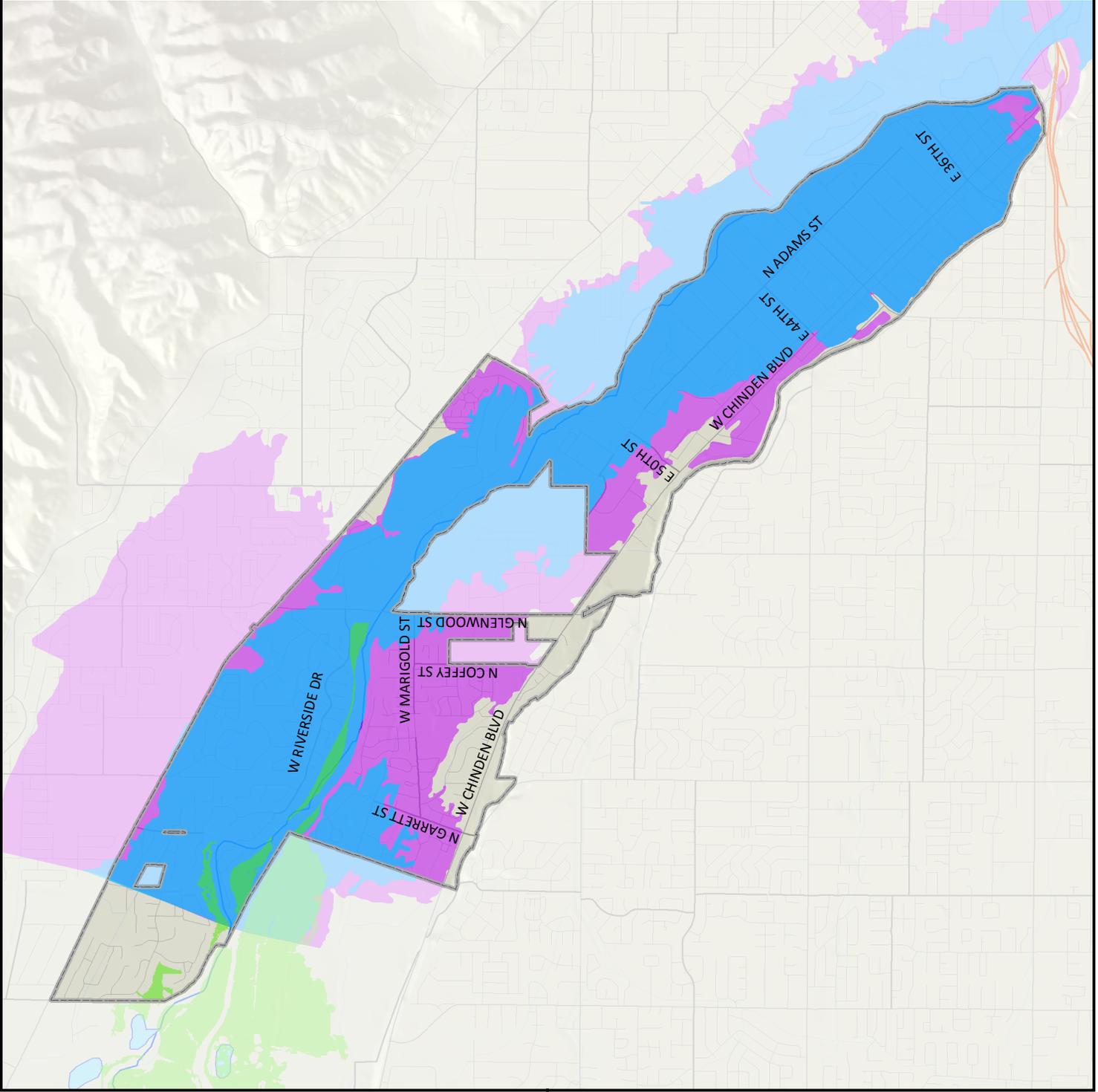
US Army Corps of Engineers
Boise River Flood Study
(500 Year)

Data Sources:

Eagle Island 100 Year Flood Study -
Idaho Department of Water Resources
Boise River Flood Study (100 & 500 Year) -
US Army Corps of Engineers
Base Data: Ada County, Idaho Department
of Water Resources



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FIGURE X - X

FEMA DFIRM Special Flood Hazard Areas

Flood Zones



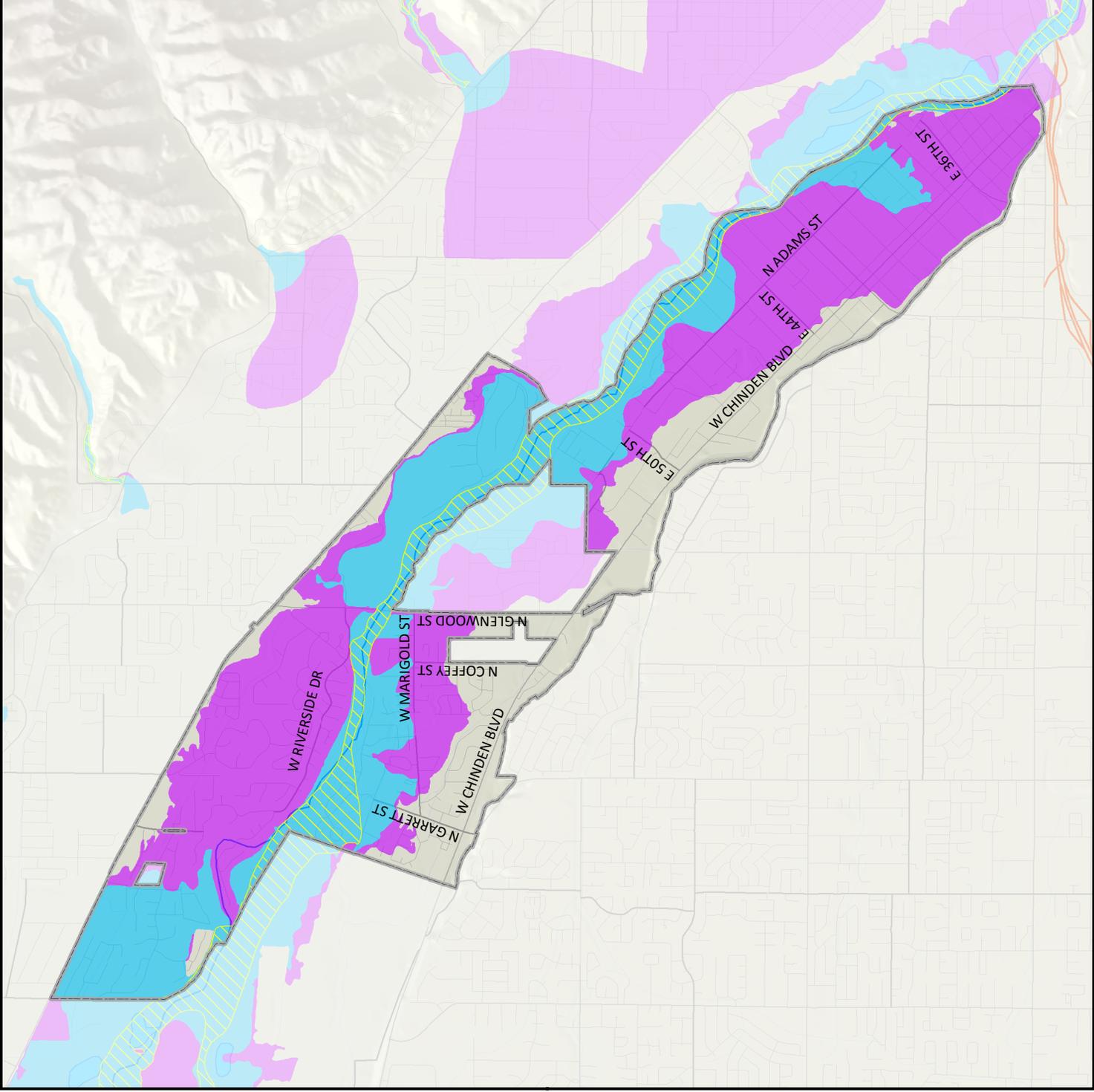
Floodway



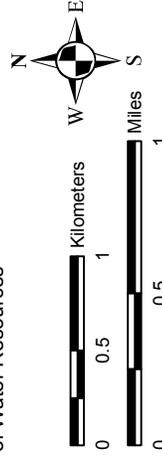
1 Percent Annual Chance
Special Flood Hazard Area
(100 Year)



0.2 Percent Annual Chance
Special Flood Hazard Area
(500 Year)



Data Sources:
FEMA Digital Flood Insurance Rate Maps
Base Data: Ada County, Idaho Department
of Water Resources



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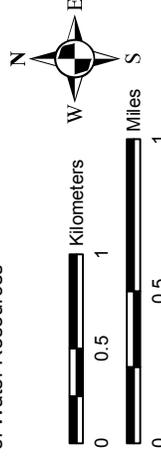
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FIGURE X - X

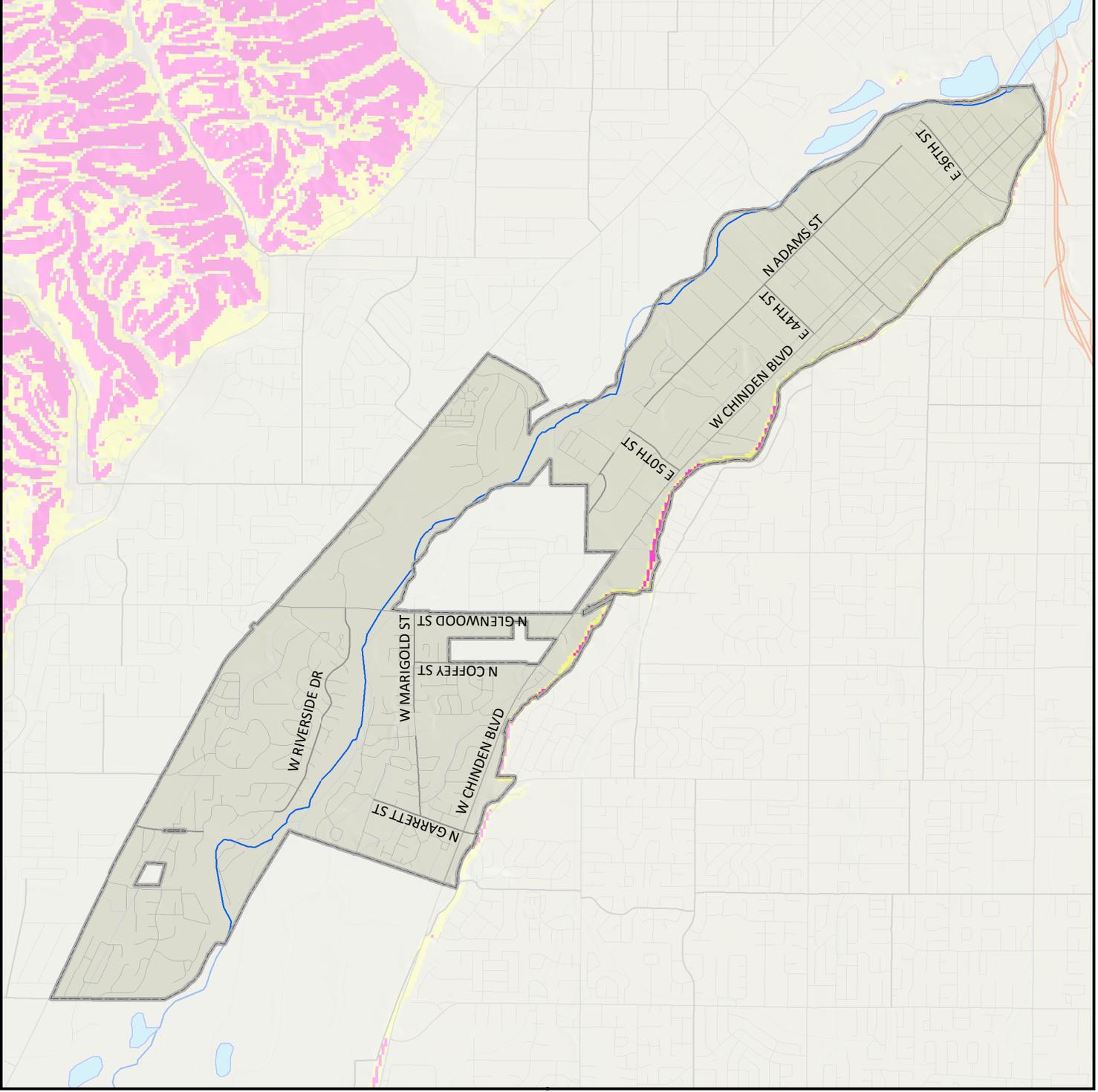
Areas of Steep Slope



Data Sources:
Percent Slope developed with USGS 10m DEM
Base Data: Ada County, Idaho Department
of Water Resources



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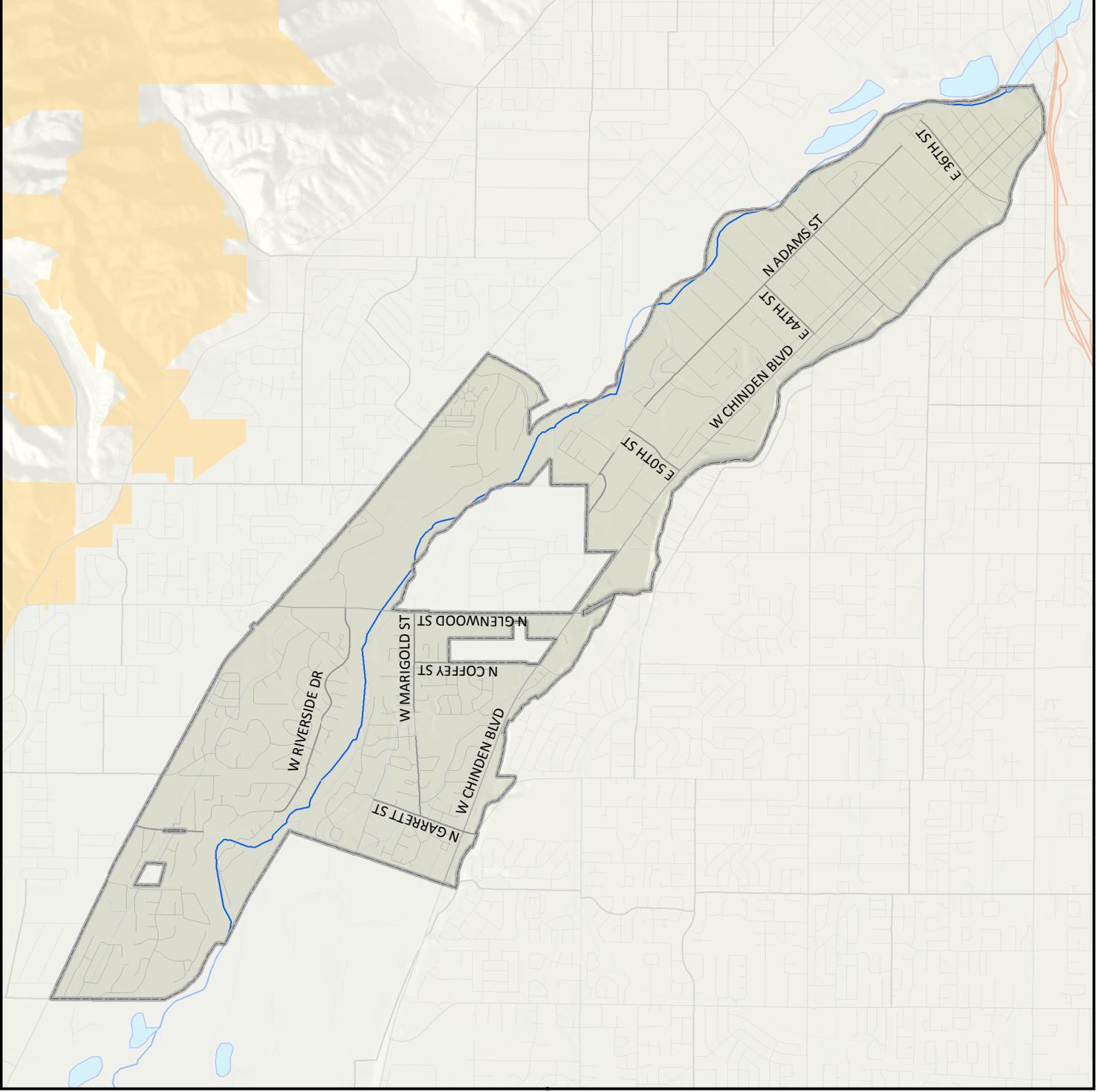
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FIGURE X - X

Wildfire Hazard Planning Areas



Wildfire Planning Area



Data Sources:

Ada County
Base Data: Ada County, Idaho Department
of Water Resources



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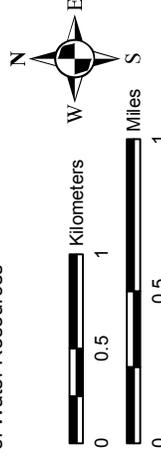
FIGURE X - X

Relative Risk to Communities from Wildland Fire

Relative Wildland Fire Risk

-  Low
-  Low-Moderate
-  Moderate
-  Moderate-High
-  High

Data Sources:
Idaho Bureau of Land Management
Base Data: Ada County, Idaho Department
of Water Resources



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