4. CITY OF GARDEN CITY

4.1 MULTI-HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

John Evans, Mayor 6015 N Glenwood Garden City, ID 83714 Telephone: (208) 472-2927

e-mail Address: jevans@gardencityidaho.org

Alternate Point of Contact

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

cschmidt@gardencityidaho.org

4.2 JURISDICTION PROFILE

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

- Date of Incorporation—May 22, 1949
- Current Population—11,223 (ACS 2014 Estimates US Census)
- Population Growth—18,311 (COMPASS CIM 2040 projection)
- 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 proceeds made Garden City a boomtown. The next year, annexations doubled the population of the village to approximately 800. Gambling provided funding for sewer, water, and street lighting. Gambling was outlawed by the state Legislature in 1953, and Garden City was expected to go away. Boise coveted Garden City's liquor license revenues and there were several attempts at disincorporation. But in 1967,

the village was chartered as a city. Much of the development of Garden City was a result of few land use regulations.

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

- Climate—Garden City has an average temperature of 52.0°F and receives an average of 12.19 inches of annual precipitation since 1865. Summers are typically warm to hot and dry averaging 71.9°F for June, July and August since 1865. Winters are generally cold and dry with occasional snow showers averaging 32.5°F for December, January and February since 1865. Spring and Fall are both mild with light precipitation averaging 51.0°F for March, April and May and 52.3°F for September, October and November since 1865.
- 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. The City Council is responsible for the adoption of this plan, the effected Departments are
 responsible for its implementation.
- Development Trends—Garden City sees a mix of commercial and residential uses. There is diversity in the residential stock of housing ranging from affordable to higher end homes. Traditionally due to lenient zoning standards much of the nonresidential uses were industrial in nature, and much of the housing in the eastern portion of the City was in Mobile Home parks. The developments north of the river and west of Glenwood are newer and mostly built with commercial uses that enjoy heavy automobile use along the arterials, with residential subdivisions on slightly larger lots that reflects a suburban character with curvilinear streets and cul-de-sacs.

Garden City has an enviable location. It is adjacent to the Boise River, is linked with major transportation arterials, and is close to downtown Boise, the commercial center of the Treasure Valley. While there is very little property available for 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 under-utilized properties.

Garden City is seeing less industrial uses. Garden City continues to see an increase mixed use development, particularly artisans and small businesses, and increasing residential densities.

4.3 CAPABILITY ASSESSMENT

An assessment of legal and regulatory capabilities is presented in Table 4-1. An assessment of fiscal capabilities is presented in Table 4-2. An assessment of administrative and technical capabilities is presented in Table 4-3. Information on National Flood Insurance Program (NFIP) compliance is presented in Table 4-4. Classifications under various community mitigation programs are presented in Table 4-5. An assessment of education and outreach capabilities is presented in Table 4-6.

4-2 TETRA TECH

Table 4-1. Legal and Regulatory Capa	bility		
		Other	
	Local Authority	Jurisdiction Authority	State Mandated
Building Code	Yes	No	Yes
Comment: Title 7 of Garden City Code currently adopts the 2012 International Building Coupdated on a three year cycle following the State of Idaho's requirements.	de and Internat	ional Residential	Code. This is
Zoning Code Comment: Title 8 of Garden City Code. Title 8 is reviewed on a biannual basis.	Yes	No	Yes
Subdivisions	Yes	No	Yes
Comment: Title 8-5 of Garden City Code. Title 8 is reviewed on a biannual basis.			
Storm water Management	Yes	No	No
Comment: Garden City complies with the requirements as per EPA requirements in NPDE (IDWR) requirements	S, and Idaho D	epartment of Wat	er Resources
Post-Disaster Recovery	Yes	No	No
Comment : Garden City participates in regional planning for mitigation, preparation and rec Management (ACEM)	covery through A	Ada County City E	mergency
Real Estate Disclosure	Yes	No	No
Comment: This is part of the Floodplain management are required to remain in compliance	e with FEMA red	quirements	
Growth Management	Yes	No	No
Comment : Garden City creates and maintains a Comprehensive Plan to manage growth. CIM 2040 projections.	Garden City has	s also adopted the	e COMPASS
Site Plan Review	Yes	No	No
Comment : Garden City conducts a site inspections to ensure compliance with City regulat through code enforcement actions.	ions and codes	at the time of red	evelopment and
Environmental Protection	Yes	No	No
Comment: Title 6 of Garden City Code Last Update 2015			
Flood Damage Prevention	Yes	No	No
Comment: Titles 7 and 8 of Garden City Code			
Emergency Management?	Yes	No	No
Comment: Police Department			
Climate Change	No	No	No
Other	No	No	No
General or Comprehensive Plan	Yes	No	Yes
Is the plan equipped to provide linkage to this mitigation plan? No			
Comment: Garden City creates and maintains a Comprehensive Plan. Adopted 2006			
Capital Improvement Plan	Yes	No	No
What types of capital facilities does the plan address? Public Works			
How often is the plan updated? Annually			
Comment: Garden City has a Capital Improvement Plan that ensures infrastructure is being performance. The Garden City Capital Improvements List covers water and sewer infrastructure is several to a constant the city of the constant to the			
s updated on an annual basis. Floodplain or Watershed Plan	Yes	No	No
rioodplain of watershed Plan Comment: The Ada County All Hazards Mitigation Plan-update is the floodplain managem			
planning area that participate in the CRS program.			
Storm water Plan	Yes	No	No
Comment: Garden City complies with the requirements as per EPA requirements in NPDE	:5		

	Local Authority	Other Jurisdiction Authority	State Mandated
Habitat Conservation Plan Comment: Under Title 36 of the Idaho State Statues Garden City defers to Idaho Fish and wetland preservation areas- BREN, Boise River Enhancement Network has adopted the B			Yes ations and
Economic Development Plan Comment: Garden City has established a Comprehensive Plan, Capital Improvement, and Economic Plan	Yes I is also incorpo	Yes rated in the Boise	No e Valley
Shoreline Management Plan	No	No	No
Community Wildfire Protection Plan The 2017 Ada County Multi-hazard Mitigation Plan is being developed to be a qualifying C	No WPP for the Ad	Yes a County plannin	No g area
Forest Management Plan	No	No	No
Climate Action Plan	No	No	No
Other Comment: ACEM Ada County Flood Response Plan. Adopted: January, 2006 Ada County Mass Casualty Incident Plan. Adopted: 12/16/2010 Ada County HAZMAT Response Plan. Adopted: April 2011 Ada County Wildfire Response Plan. Adopted: May 2010	Yes	No	No
Comprehensive Emergency Management Plan Comment:	Yes	No	No
Threat & Hazard Identification & Risk Assessment Comment: ACEM Multi-Hazard Mitigation Plan, Ada County THIRA 2015	Yes	No	No
Post-Disaster Recovery Plan	No	No	No
Continuity of Operations Plan	No	No	No
Public Health Plan Comment: Central District Health Department Emergency Operations Plan, 2013	No	Yes	No

Table 4-2. 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	No					
Development Impact Fees for Homebuyers or Developers	Yes					
Other	N/A					

4-4 TETRA TECH

Table 4-3. Administrative and Technical Capability							
Staff/Personnel Resources	Available?	Department/Agency/Position					
Planners or engineers with knowledge of land development and land management practices	Yes	Development Services/Garden City/ Planning Staff					
Engineers or professionals trained in building or infrastructure construction practices	Yes	Public Works/Garden City/ Water, Sewer, and Engineering Staff					
Planners or engineers with an understanding of natural hazards	Yes	Public Works and Development Services/Garden City/ Staff					
Staff with training in benefit/cost analysis	No						
Surveyors	Yes	Public Works/Garden City/Engineer					
Staff capable of making substantial damage estimates	No						
Personnel skilled or trained in GIS applications	Yes	Development Services/Garden City/GIS Administrator					
Scientist familiar with natural hazards in local area	No						
Emergency manager	Yes	ACEM/Ada County/Director of ACEM					
Grant writers	No						

Table 4-4. National Flood Insurance Program Compliance						
Criteria	Response					
When did the community enter the NFIP?	1978					
When did the Flood Insurance Rate maps become effective?	2002					
What local department is responsible for floodplain management?	Development Services					
Who is your floodplain administrator? (department/position)	Development Services Director					
Is this a primary or auxiliary role?	Auxiliary					
Are any certified floodplain managers on staff in your jurisdiction?	No					
What is the date of adoption of your flood damage prevention ordinance?	2008					
Does your floodplain management program meet or exceed minimum requirements?	Meet					
If so, in what ways?						
When was the most recent Community Assistance Visit or Community Assistance Contact?	2012					
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?	No					
If so, please state what they are.						
Do your flood hazard maps adequately address the flood risk within your jurisdiction?	No					
If no, please state why.	Flooding will not adhere to a model. There will be debris, etc.					
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes					
If so, what type of assistance/training is needed?	Ongoing					
Does your jurisdiction participate in the Community Rating System (CRS)?	Yes					
 If so, is your jurisdiction seeking to improve its CRS Classification? 	No					
 If not, is your jurisdiction interested in joining the CRS program? 						
How many Flood Insurance policies are in force in your jurisdiction?	471					
What is the insurance in force?	\$127,408,500					
What is the premium in force?	\$311,358					
How many total loss claims have been filed in your jurisdiction?	12					
 How many claims were closed without payment/are still open? 	6					
What were the total payments for losses?	\$25,661					

Table 4-5. Community Classifications							
Participating? Classification Date Classifie							
Community Rating System	Yes	8	2013				
Building Code Effectiveness Grading Schedule	No	10 (not participating)	N/A				
Public Protection	Yes	3/8/9 (NACFR)	N/A				
Storm Ready	Yes	Blue	N/A				
Firewise	No	N/A	N/A				

Table 4-6. Education and Outreach						
Criteria	Response					
Do you have a Public Information Officer or Communications Office?	City Administrator					
Do you have personnel skilled or trained in website development?	No					
Do you have hazard mitigation information available on your website?	Yes					
If yes, please briefly describe.	Gardencityidaho.org					
Do you utilize social media for hazard mitigation education and outreach?	Yes					
If yes, please briefly describe.	ACEM website and floodplain page					
Do you have any citizen boards or commissions that address issues related to hazard mitigation?	No					
Do you have any other programs already in place that could be used to communicate hazard-related information?	Yes					
If yes, please briefly describe.	Social Media, emergency broadcasting, geo Notify					
Do you have any established warning systems for hazard events?	Yes					
If yes, please briefly describe.	Code Red/ISAWS – residents may sign up to receive emergency notifications and critical community alerts. Both systems are IPAWS enabled and may additionally access that integrated system for public warnings.					

4.4 INTEGRATION WITH OTHER PLANNING INITIATIVES

4.4.1 Existing Integration

The following plans and programs currently integrate the goals, risk assessment and/or recommendations of the Multi-Hazard Mitigation Plan:

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

4.4.2 Opportunities for Future Integration

The following plans and programs do not currently integrate the goals, risk assessment and/or recommendations of the Multi-Hazard Mitigation Plan, but provide an opportunity for future integration:

• Comprehensive Plan—Integrate the Parks and Waterway Plan and Multi-Hazard Mitigation Plan to be incorporated, better inform, and update the Garden City Comprehensive Plan.

4-6 TETRA TECH

4.5 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 4-7 lists all past occurrences of natural hazards within the jurisdiction.

Table 4-7. Natural Hazard Events Damage County Wide						
	FEMA Disaster #					
Type of Event	(if applicable)	Date	Preliminary Damage Assessment			
Flood		1/1979	\$50,000			
Wind		3/1981	\$36,000			
Wind		6/1981	\$50,000			
Flood		06/1983	\$147,000			
Earthquake		10/1983	\$4,000,000			
Flooding		02/1986	\$20,000			
Wind		7/1987	\$10,000			
Severe Storm		1/1988	\$8,700			
Drought		1987-1992	\$500,000,000			
Flood		8/1992	\$4,545			
Wind		10/1992	\$6,250.00			
Winter Weather		11/1992	\$9,800.00			
Severe Storm		4/27/1995	\$50,000			
Lightning		7/1995	\$5,000			
Flood		1/1997	\$65,000,000			
Flood		3-7/1997	\$50,000,000			
Flood		9/1997	\$57,000			
Severe Storm		4/1998	\$20,000			
Severe Storm		9/1998	\$38,000			
Severe wind		3/29/2009	\$33,000			
Water Main Break at Remington Street		4/1/2012	500,000			

4.6 JURISDICTION-SPECIFIC VULNERABILITIES

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

Other noted vulnerabilities include:

- Isolation- All access in and out of the City are on State Highway facilities. These facilities may be severely constrained with the vehicular traffic that they may need to accommodate in an event. Moreover, Chinden is inadequate for non-vehicular mobility purposes. Chinden does not accommodate bike lanes, has few and unsafe crossings, has irregular sidewalks, and uncontrolled access points. Census track 11 is located between the Boise River and Chinden from Glenwood to the eastern borders of Garden City. Census Track 11 contains a concentration of vulnerable populations that cannot drive.
- ACHD and ITD Roadway drainage could cause flooding in Garden City if the drainage system is undersized or not adequately maintained.
- Settlers Canal is at a higher elevation than the City. If the canal is not adequately maintained it could pose as a flood threat.
- Aging and undersized water and sewer infrastructure.

4.7 HAZARD RISK RANKING

Table 4-8 presents the ranking of the hazards of concern.

Table 4-8. Hazard Risk Ranking							
Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category				
1	Flooding	42	High				
2	Severe Weather	33	High				
3	Earthquake	32	High				
4	Dam Inundation	18	Medium				
5	Drought	9	Low				
6	Volcano	6	Low				
7	Landslide	3	Low				
8	Wildfire	1	Low				

4.8 STATUS OF PREVIOUS PLAN INITIATIVES

Table 4-9 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 4-9. Status of Previous Action Plan						
Action Item	Completed	Carry Over to Plan Update	Removed; No Longer Feasible			
GC1—Update and training on Emergency Action Plan	No	Yes				
GC2 —Establish emergency preparedness inventory with inspection and replacement plan	No	Yes				
GC3 —Develop/update a Capital Improvement Plan for capital facilities/infrastructure within the City.	Yes/On Going	Yes				
GC4—Installation of manhole locking mechanisms in the floodway	Yes	No				
GC5—Fresh water supply well house security camera installation	Yes	No				
GC6—Garden City Parks security camera installation	Yes/Ongoing	Yes				
Comment:						
GC8—Acquisition of vulnerable property within the floodplain for use as parks to mitigate flood waters	No	Yes				
GC9—Purchase of equipment to aid in recovery from a flood event for the Library	No	No				
GC10 Maintain community's compliance and good standing under the National Flood Insurance program	Yes/On Going	Yes				
GC11 Obtain portable generators for use in Ada County during power outages and other emergency situations	Yes	No				
GC12 —Continue to maintain/enhance the City's classification under the Community Rating System	Yes/On Going	Yes				
GC13—Integrate Multi-Hazard Mitigation Plan into the Garden City Comprehensive Plan	No	Yes				
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.	No	Yes				

4-8 TETRA TECH

4.9 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 4-10 lists the actions that make up the City of Garden City hazard mitigation action plan. Table 4-11 identifies the priority for each action. Table 4-12 summarizes the mitigation actions by hazard of concern and the six mitigation types.

Table 4-10. Hazard Mitigation Action Plan Matrix						
Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
					ations for alternate flood m	
efforts, with an	emphasis on green infra	structure to redu	ice floodplain and anticipa	ated Base Flood	Elevations. An example of floodplain capacity and gr	f such an
New and Existing	Flooding, Drought	1, 2, 3, 6, 8, 9,	ACEM, Planning, Public Works, BHS, FEMA	High	Grants	Short term
levees to deter hydrologically	mine condition and viabil	lity of the levees	in Garden City and their	hydraulic significa	City. Garden City needs an ance. If any of the levees or risionally accrediting each	could be
New and Existing	Flooding	1,2, 9,10	ACEM, Planning, Public Works, Corps of Engineers, FEMA	High	Corps of Engineers	Short term
GC3 Water an	d Sewer Pipe replaceme	nt				
New and Existing	Flooding, Severe Weather, Earthquake	1, 9, 10	Garden City	Medium	Local	Ongoing
minimum NFII	P requirements. Such pr	rograms include	but are not limited to: e	nforcing an ado	rograms that meet or exc pted flood damage preve nformation on floodplain i	ntion
New and existing	Flooding	2, 5, 6, 8, 9, 10	Garden City	Low	Local	Ongoing
GC5 Continue	to maintain/enhance th	e City's classific	cation under the Commu	ınity Rating Syst	tem	
New and existing	Flooding	6,8,9, 10	Garden City	Low	Local	Ongoing
					azard-prone areas to pro	tect
structures fror Existing	n future damage, with p All Hazards	roperties with e 2, 3, 8, 9, 10	xposure to repetitive los ACEM, Planning, Public Works	ses as a priority High	FEMA Hazard Mitigation Grant Programs, ICC	Long Term
GC7 Integrate New and Existing	Multi-Hazard Mitigation All Hazards	Plan into the G 2, 6, 4, 8, 9, 10	arden City Comprehens Garden City	sive Plan. Medium	Grant/ Local	Short term
GC8 Establish New and Existing	n emergency preparedne All Hazards	ess inventory wi 1, 2, 7, 10	th inspection and replac Garden City	ement plan Low	Local	Short term

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
New and Existing	All Hazards	1, 2, 10	facilities/infrastructure w Garden City	Low	Local	Short term
GC10 Considerate hazards of contract of co		gulatory standar	ds that prevent or reduc	e risk to the buil	t environment from the k	nown
New and Existing	All hazards	1, 3, 4, 5, 8, 10	Garden City Planning	Low	Local	Short Term
GC11 Support New and Existing	t County-wide initiatives All Hazards	All	Garden City Public Works/ Planning ACEM	Low	Local	Short term Ongoing
GC12 Continui New and Existing	ing of Operations Plan All Hazards	1, 10	Garden City Public Works/Police Department/ Planning ACEM	Medium	Local	Short
GC13 EOP En New and Existing	nergency Operations Plai All Hazards	n 1, 7, 8, 10	Garden City Public Works/Police Department/ Planning ACEM	Medium	Grants	Medium
GC14 Recover New and Existing	ry Plan All Hazards	1, 10	Garden City Public Works/Police Department/ Planning ACEM	Medium	Grants	Medium
GC15 Garden New and Existing	City Parks security can All Hazards	nera installation 10	Garden City Public Works/Police Department/	Low	Local/ Grants	Short
GC16 Streetlion New	ght replacement/convers All Hazards	sion to alternativ 10	e energy streetlights Garden City Public Works/Urban Renewal	Medium	Local/ Grants/ Redevelopment	Medium
GC17 Acquisit Existing	tion of vulnerable prope All Hazards	rty for use as pa 2, 9, 10	arks ACEM, Planning, Public Works	High	Grants	Long Term
GC18 Purchas New and Existing	se of stand by generator All Hazards	for City Hall an 1, 7, 10	d Operations Center Garden City Public Works	Medium	Local/ Grants	Medium
GC19 Obtain p New and Existing	oortable generators for us All Hazards	se in Ada County 1,7, 10	during power outages ar Garden City Public Works/Police Department/	nd other emerger Low	ncy situations Local/ Grants	Short

4-10 TETRA TECH

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline	
GC20-Whenever possible, coordinate with local experts and employ natural environmental processes in mitigation activities that increase ecosystem resilience and reduce the impacts of flooding on the built environment.							
New and Existing	Flood, Dam Failure	2, 5, 9	Garden City	Medium	Local, Grants, development Fees	Long term	

Table 4-11. Mitigation Strategy Priority Schedule								
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 Priority ^a
GC1	7	High	High	Yes	Yes	No	Very High	Very High
GC2	4	High	High	TBD	Yes	No	High	High
GC3	3	High	High	Yes	No	Yes	High	Low
GC4	6	Medium	Low	Yes	No	Yes	High	Low
GC5	4	Low	Low	Yes	No	Yes	Medium	Low
GC6	5	Medium	High	No	Yes	No	Low	Medium
GC7	6	Low	Low	Yes	No	No	High	Medium
GC8	4	High	Low	Yes	No	Yes	High	Medium
GC9	3	High	Low	Yes	No	Yes	High	Low
GC10	6	High	Low	Yes	No	Yes	Medium	Low
GC11	10	Medium	Low	Yes	No	Yes	Medium	Low
GC12	2	High	Medium	Yes	Yes	Yes	Medium	Low
GC13	4	High	Medium	Yes	Yes	Yes	Medium	Medium
GC14	2	High	Low	Yes	Yes	No	Medium	Medium
GC15	1	Low	Low	Yes	No	No	High	Low
GC16	1	Medium	High	No	No	No	Medium	Medium
GC17	3	Medium	High	No	Yes	No	Medium	High
GC18	5	High	Medium	Yes	No	No	Medium	Medium
GC19	3	High	Low	Yes	Yes	No	Medium	Medium
GC20	3	High	Medium	Yes	Yes	No	Medium	High

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

Table 4-12. Analysis of Mitigation Actions							
	Action Addressing Hazard, by Mitigation Type ^a						
Hazard Type	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects	
Flooding	GC 1, GC 2, GC 4, GC 6, GC 7, GC 9, GC 11, GC 17, GC 20	GC 1, GC 2, GC 3, GC 5, GC 6, GC 10, GC 11, GC 14, GC 20	GC 5, GC 7, GC 11, GC 13, GC 14	GC 1, GC 3, GC 6, GC 11, GC 14, GC 20	GC 3, GC 4, GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16, GC 18, GC 19	GC 1, GC 2, GC 3, GC 11	
Severe Weather	GC 6, GC 7, GC 9, GC 11, GC 17	GC 3, GC 6, GC 10, GC 1, GC 14	GC 7, GC 11, GC 13, GC 14	GC 3, GC 11, GC 14	GC 3, GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16, GC 18, GC 19	GC 3, GC 11	
Earthquake	GC 6, GC 7, GC 9, GC 11, GC 17	GC 3, GC 6, GC 10, GC 11, GC 14	GC 7, GC 11, GC 13, GC 14	GC 3, GC 11, GC 14	GC 3, GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16, GC 18, GC 19	GC 3, GC 11	
Dam Inundation	GC 6, GC 7, GC 11, GC 17, GC 20	GC 6, GC 10, GC 11, GC 14, GC 20	GC 7, GC 11, GC 13, GC 14	GC 11, GC 14, GC 20	GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 18, GC 19	GC 11	
Drought	GC 1, GC 6, GC 7, GC 9, GC 11, GC 17	GC 6, GC 10, GC 11, GC 14	GC 7, GC 11, GC 13, GC 14	GC 1, GC 11, GC 14	GC 8, GC 11, GC 12, GC 13, GC 14, GC 18, GC 19	GC 1, GC 11	
Volcano	GC 6, GC 7, GC 11, GC 17	GC 6, GC 10, GC 11, GC 14	GC 7, GC 11, GC 13, GC 14	GC 11, GC 14	GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 18, GC 19	GC 11	
Landslide	GC 6, GC 7, GC 11, GC 17	GC 6, GC 10, GC 11, GC 14	GC 7, GC 11, GC 13, GC 14	GC 6, GC 11, GC 14	GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 18, GC 19	GC 11	
Wildfire	GC 6, GC 7, GC 11, GC 15, GC 17	GC 6, GC 10, GC 11, GC 14	GC 7, GC 11, GC 13, GC 14	GC 6, GC 1, GC 141	GC 8, GC 11, GC 12, GC 13, GC 14, GC 15, GC 18, GC 19	GC 11	

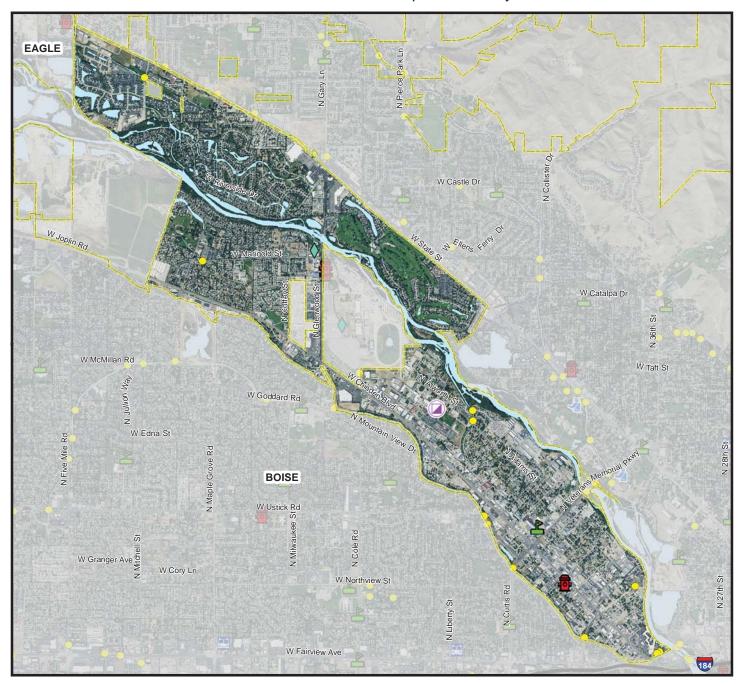
a. See the introduction to this volume for explanation of mitigation types.

4.10 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Ground-truthed topography

4-12 TETRA TECH

Essential Facilities & Transportation Systems



Legend





Medical Care Facilities



Police Stations

Schools & Educational **Facilities**

Airport Facilities 十





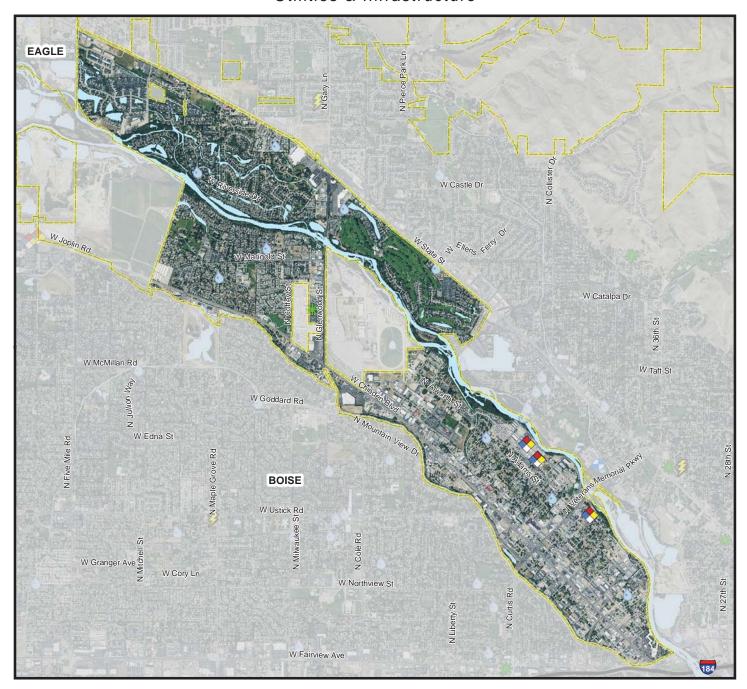






Data Sources: Ada County, U.S. Geological Survey, COMPASS, Idaho DHS

Utilities & Infrastructure



Legend

- * Communication Facilities
- Dams
- Electric Power Facilities
- Hazardous Materials
- Natural Gas Facilities
- Potable Water Facilities
- Wastewater Facilities

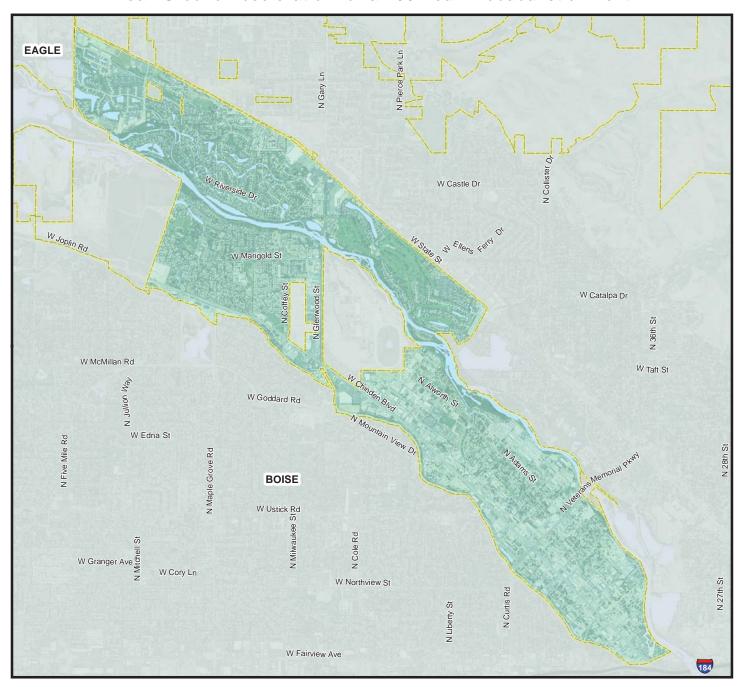








Peak Ground Acceleration for a 100-Year Probabalistic Event



Legend

Ada County Boundary

Modified Mercalli Scale, Potential Shaking

IV (Light)

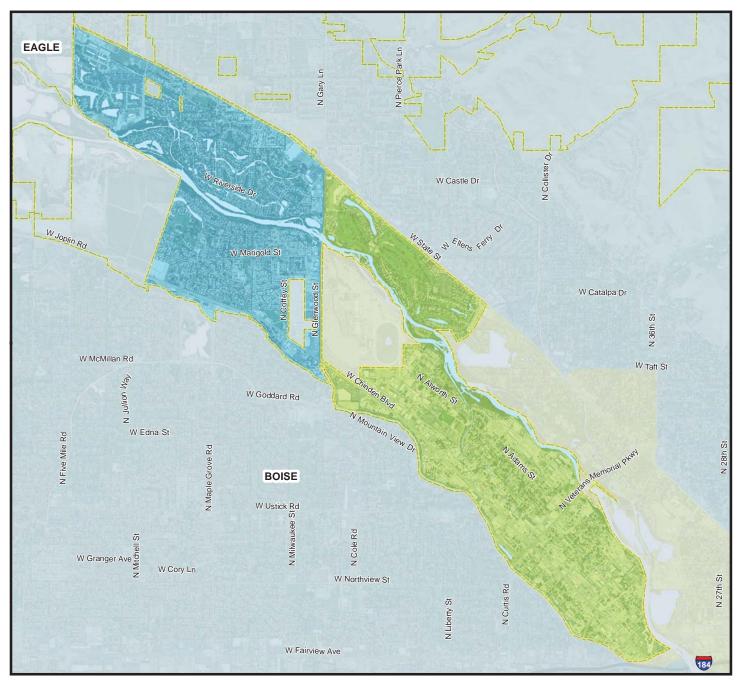




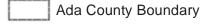




Peak Ground Acceleration for a 500-Year Probabalistic Event



Legend



Modified Mercalli Scale, Potential Shaking





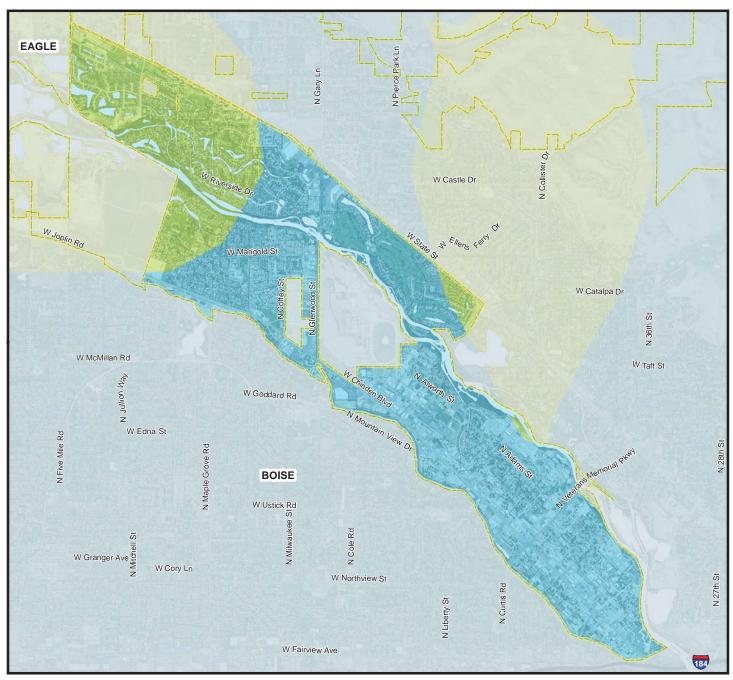




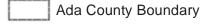


Data Sources: Ada County, U.S. Geological Survey, Hazus

Squaw Creek M7.0 Scenario Peak Ground Acceleration



Legend



Modified Mercalli Scale, Potential Shaking





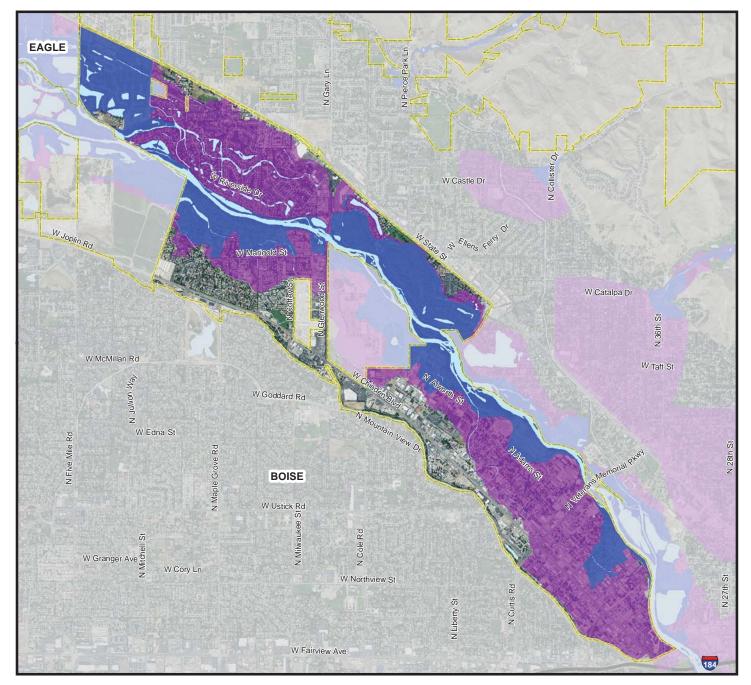






Data Sources: Ada County, U.S. Geological Survey

FEMA DFIRM Flood Hazard Zones



Legend



Ada County Boundary



Water Bodies



1% Annual Chance Flood Boundary (100 Year)



0.2% Annual Chance Flood Boundary (500 Year)

Flood Hazard Areas as depicted on FEMA Digital Insurance Rate Maps (DFIRM). This map is a combination of effective and preliminary DFIRM boundaries.

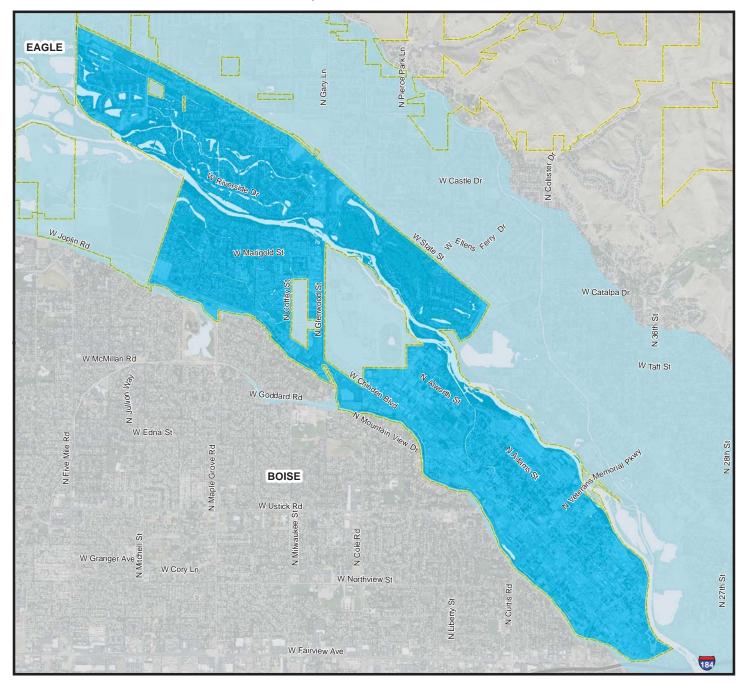






Data Sources: Ada County, U.S. Geological Survey, FEMA, USACE

Lucky Peak Dam Failure



Legend



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: Ada County, U.S. Geological Survey, U.S. Army Corp of Engineers

Ada County does not warrant the accuracy, reliability or timeliness of any information on this map, and shall not be held liable for losses caused by using this information.