

## 8. ADA COUNTY HIGHWAY DISTRICT

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### 8.1 MULTI-HAZARD MITIGATION PLAN POINT OF CONTACT

#### Primary Point of Contact

Tim Nicholson, Maintenance Manager  
3775 Adams Street  
Garden City, ID 83714  
Telephone: 387-6322  
e-mail Address: [tnicholson@achdidaho.org](mailto:tnicholson@achdidaho.org)

#### Alternate Point of Contact

Dale Kuperus, Engineering Manager  
3775 Adams Street  
Garden City, ID 83714  
Telephone: 387-6222  
e-mail Address: [dkuperus@achdidaho.org](mailto:dkuperus@achdidaho.org)

### 8.2 JURISDICTION PROFILE

#### 8.2.1 Overview

The Ada County Highway District (ACHD) owns and maintains 4,825 lane miles of roads and streets and approximately 765 bridges in Ada County with an estimated non-depreciated value of \$4.235 billion. ACHD was established by referendum on May 25, 1971 and commenced operations on January 1, 1972. It is a separate unit of local government responsible for all roads, bridges, streets, alleys and public rights-of-way in Ada County, except for those designated as part of the state or federal Highway system. ACHD has approximately 325 employees. Funding comes from various sources including property taxes, State Highway Users Funds, Development Impact Fees, cost sharing payments, Ada County Registration Fees, State Sales Tax and other miscellaneous sources. ACHD is governed by a five member Commission.

#### 8.2.2 Service Area and Trends

The district serves a population of 426,236 as of 2014. Its service area covers an area of—1,060 square miles, which has a total value of \$83,832,012,498.

Ada County experienced a population increase of 8.6% between 2010 and 2014 (source Wikipedia). That trend is expected to increase as economic growth continues.

#### 8.2.3 Assets

Table 8-1 summarizes the critical assets of the district and their non-depreciated value as of September 30, 2015.

**Table 8-1. Special Purpose District Assets**

Asset	Value
<b>Property</b>	
16,085 acres of land	\$2,015,000,000
<b>Critical Infrastructure and Equipment</b>	
4,825 lane miles of street	\$2,120,000,000
765 bridges	\$100,000,000
<b>Total:</b>	<b>\$4.235 billion</b>
<b>Critical Facilities</b>	
ACHD Adams Admin Building 3775 Adams St, 5.85 Acres	\$3,052,576
ACHD Urban Operations, 318 E. 37th St., 13.45 Acres	\$3,488,658
ACHD Cloverdale, 440 N. Cloverdale, 14.98 Acres	\$2,180,411
Building contents	\$6,129,653
Equipment	\$38,326,281
Material/Inventory	\$3,029,598
<b>Total:</b>	<b>\$56.2 million</b>

### 8.3 PLANNING AND REGULATORY CAPABILITIES

The following existing codes, ordinances, policies or plans are applicable to this Multi-Hazard Mitigation Plan:

- ACHD Capital Improvement Plan
- Resolution 812 – ACHD Standard Operating Plan for Right-of-Way Spill, Container, and Debris Response
- Sections 7000, 7100, and 7200 of the ACHD Policy Manual pertaining to Land Development Requirements
- Sections 8000, 8200, and 8300 of the ACHD Policy Manual pertaining to Stormwater Management and Discharge Requirements

### 8.4 FISCAL, ADMINISTRATIVE AND TECHNICAL CAPABILITIES

An assessment of fiscal capabilities is presented in Table 8-2. An assessment of administrative and technical capabilities is presented in Table 8-3.

**Table 8-2. Fiscal Capability**

Financial Resources	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	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes – Vehicle Registration Fees, Special Impact Fees, Gas Tax, Sales Tax, Highway User Fund Fees

**Table 8-3. 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, Capital Projects, and Planning Departments
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering, Maintenance, and Capital Projects Divisions
Planners or engineers with an understanding of natural hazards	Yes	Engineering and Maintenance Divisions
Staff with training in benefit/cost analysis	Yes	Accounting and Capital Projects
Surveyors	Yes	Engineering Division
Personnel skilled or trained in GIS applications	Yes	GIS Department
Scientist familiar with natural hazards in local area	No	None
Emergency manager	No	None
Grant writers	Yes	Tom Ferch
Other	No	None

## 8.5 EDUCATION AND OUTREACH CAPABILITIES

An assessment of education and outreach capabilities is presented in Table 8-4.

**Table 8-4. Education and Outreach**

Criteria	Response
Do you have a Public Information Officer or Communications Office?	Yes – Craig Quintana
Do you have personnel skilled or trained in website development?	Yes – Diane Rausch and Craig Quintana
Do you have hazard mitigation information available on your website? • If yes, please briefly describe.	No
Do you utilize 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 Facebook, Twitter, ACHD Website, Media Releases
Do you have any established warning systems for hazard events? • If yes, please briefly describe.	Yes 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.

## 8.6 INTEGRATION WITH OTHER PLANNING INITIATIVES

The following describe the jurisdiction’s process for integrating the Multi-Hazard Mitigation Plan into existing plans and programs.

### 8.6.1 Existing Integration

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

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

## 8.6.2 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:

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

## 8.7 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 8-5 lists all past occurrences of natural hazards within the jurisdiction.

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

## 8.8 JURISDICTION-SPECIFIC VULNERABILITIES

Noted vulnerabilities of the jurisdiction include:

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

## 8.9 HAZARD RISK RANKING

Table 8-6 presents the ranking of the hazards of concern.

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Flood	45	High
2	Earthquake	36	High
3	Severe Weather	33	High
4	Landslide	16	Medium
5	Dam Inundation	15	Medium
6	Drought	9	Low
7	Volcano	6	Low
8	Wildfire	0	Low

## 8.10 STATUS OF PREVIOUS PLAN INITIATIVES

Table 8-7 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.

## 8.11 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 8-8 lists the actions that make up the Ada County Highway District hazard mitigation action plan. Table 8-9 identifies the priority for each action. Table 8-10 summarizes the mitigation actions by hazard of concern and the six mitigation types.

## 8.12 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The Action ACHD 8 incorporates one of the necessary pieces of information ACHD is seeking to help evaluate our bridge structure elevations relative to the 100 year flood water surface elevation. This data, combined with more current LIDAR mapping of the river and the new FEMA flood maps, should help ACHD determine needs and priorities to assess the river crossing structures.

**Table 8-7. Status of Previous Action Plan**

Action Item	Completed	Carry Over to Plan Update	Removed; No Longer Feasible
<p><b>ACHD 1—Pintail/Drake/Widgeon Flooding.</b> Partner with DD4. Ongoing flooding problem for 10+ years. Vactor truck must pump during routine storms. Storm drain under capacity, two 18" pipes converge and leave as one 18". ACHD is initiating topographic surveys to look at solutions.</p> <p><i>Comment:</i> ACHD needs to obtain permanent easements for further repairs. HOA fixed some issues and flooding is improved.</p>		X	
<p><b>ACHD 2—Dry Creek Bridge @ Floating Feather, w/o Eagle Road Replacement.</b> Replace structure to increase freeboard and reduce restriction on Dry Creek.</p> <p><i>Comment:</i> Bridge is only 24 years old with a sufficiency rating of 82 (out of 100). Replacing Bridge #35 (north of Old Barn) at Eagle Road in Fiscal Year 2017.</p>			X
<p><b>ACHD 3—Meridian Culvert Replacements.</b> Partner with City of Meridian. Nine Mile Creek at: E. Watertower Lane, E. Franklin Road, N. Meridian Road, N. Ten Mile Road, W. Ustick Road. Ten Mile Creek at: Locust Grove Road. Eight Mile Creek at: Overland Road. Five Mile Creek at: S. Topaz Avenue, S. Rackham Way, S. Eagle Road, S. Wells Street, E. Pine Street, E. Badley Avenue.</p> <p><i>Comment:</i> Nine Mile at Watertower – This will be done when future development happens in the area. No current work planned. Nine Mile at Franklin – No current work planned. Installed storm drain in 2nd Street to Bower in 2004 to relieve capacity problems. Nine Mile at Meridian – Bridge #124X was replaced and upsized with an aluminum CMP with the Meridian Split Corridor 2 Project in 2013. The pipe also has a concrete slab over it. Nine Mile at Ten Mile – Bridge #113P was replaced in 2015 and upsized to a 95" x 67" elliptical aluminum pipe. Nine Mile at Ustick – This will be done with a future ACHD project within the next 10 years. Ten Mile at Locust Grove – Bridge #229 was built in 1985 and has a rating of 72 (out of 100). It is part of the IFYWP and will be reconstructed in 2019-2020. Eight Mile at Overland – No current work planned. Five Mile at Topaz – It is part of the IFYWP and will be reconstructed in 2019-2020. Five Mile at Jade – It is part of the IFYWP and will be reconstructed in 2019-2020. Five Mile at Rackham – This will require a partnership with ITD. No current work planned. Five Mile at Wells – Bridge #261 was built in 1965 and has a rating of 81.8 (out of 100). It will be replaced in the next 10-15 years. Five Mile at Pine – this is getting replaced with the Pine – Locust Grove to Main Project in 2018-2019. Five Mile at Badley – Bridge #133 is a 10' CMP built in 1998 with the Sterling Subdivision. It has a rating of 91.8 (out of 100). No current work planned.</p>		X	
<p><b>ACHD 4—Snowflake and Crocus (Lakewood Sub, SE Boise) Realign storm drain</b> from the back yards to the street and increase the pipe size to reduce restrictions. Ongoing problem for ACHD Drainage Crew. Vactor truck must pump during routine storms.</p> <p><i>Comment:</i> ACHD worked with HOA to explain and execute how over-watering has negatively affected this issue. HOA is getting better at reducing over-watering.</p>		X	
<p><b>ACHD 5—Pave Dry Creek Road from SH 55 to Seaman's Gulch Road.</b></p> <p><i>Comment:</i> Completed in August 2011.</p>	X		
<p><b>ACHD 6—Create a Storm Water Utility.</b></p> <p><i>Comment:</i> The internal planning process is underway.</p>		X	
<p><b>ACHD 7—Remove sediment from all public street storm water ponds (approx. 642).</b></p> <p><i>Comment:</i> Added one new Vactor truck and five new full time employees to staff in October 2015. Adding another Vactor truck in Fiscal Year 2017. Ongoing cleaning of ACHD storm water ponds.</p>		X	
<p><b>ACHD 8—Support county-wide initiatives identified in Volume 1.</b></p> <p><i>Comment:</i> Ongoing.</p>		X	
<p><b>ACHD 9—Continue to support the implementation, monitoring, maintenance, and updating of the Plan as defined in Volume 1.</b></p> <p><i>Comment:</i> Ongoing.</p>		X	

**Table 8-8. Hazard Mitigation Action Plan Matrix**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
<b>ACHD 1—Pintail/Drake/Widgeon Flooding</b>						
Existing	Flood, Severe Weather	2,3,9	ACHD and DD4	Low	ACHD Funds	Short Term
<b>ACHD 2—Meridian Culvert Replacements</b>						
Existing	Flood, Severe Weather	1,2,3,4,9,10	ACHD and City of Meridian	High	ACHD Funds, City of Meridian Funds, Federal Grants	Long Term
<b>ACHD 3—Snowflake and Crocus Pipe Realignment</b>						
Existing	Flood, Severe Weather	2,3,9	ACHD	Low	ACHD Funds	Short Term
<b>ACHD 4—Create a Storm Water Utility</b>						
Existing and New	Flood, Severe Weather, Drought	1,2,3,4,5,6,9,10	ACHD, Boise, Meridian, Star, Eagle, Kuna, Ada County, and Drainage Districts	High	ACHD Funds, City and County Funds, Federal Grants	Long Term
<b>ACHD 5—Remove sediment from all public street storm water ponds</b>						
Existing and New	Flood, Severe Weather	1,2,3,9,10	ACHD	Medium	ACHD Funds	Short Term
<b>ACHD 6—Support county-wide initiatives identified in Volume 1.</b>						
Existing and New	All Hazards	1,2,3,4,5,6,7,8,9,10	ACHD	Low	ACHD Funds, Staff Time	Short Term
<b>ACHD 7—Continue to support the implementation, monitoring, maintenance, and updating of the Plan as defined in Volume 1.</b>						
Existing and New	All Hazards	1,2,3,4,5,6,7,8,9,10	ACHD	Low	ACHD Funds, Staff Time	Short Term
<b>ACHD 8—Survey Boise River bridge structures and compare to 100 year flood water surface elevation.</b>						
Existing	Flood, Severe Weather, Dam Inundation	2,3,10	ACHD	Low	ACHD Funds	Short Term
<b>ACHD 9—Eckert Road Bridges #2147 and #2148 replacement over the Boise River.</b>						
Existing	Existing	Existing	Existing	Existing	Existing	
<b>ACHD 10—Fairview Avenue Bridges #2196 and #2197 replacement over the Boise River.</b>						
Existing	Existing	Existing	Existing	Existing	Existing	
<b>ACHD 11—Linder Road Bridges #1078, #2035, and #2036 replacement over the Boise River.</b>						
Existing	Existing	Existing	Existing	Existing	Existing	
<b>ACHD 12—Relocate ACHD Traffic Management Center to a new location (to be decided) outside of floodplain.</b>						
Existing and New	Existing and New	Existing and New	Existing and New	Existing and New	Existing and New	
<b>ACHD 13—Gowen Road Bridge #2173 over the New York Canal.</b>						
Existing	Existing	Existing	Existing	Existing	Existing	
<b>ACHD 14—Develop and implement more Green Stormwater Infrastructure standards to stabilize slopes and drainage facilities and prevent erosion.</b>						
Existing and New	Existing and New	Existing and New	Existing and New	Existing and New	Existing and New	

**Table 8-9. 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 <sup>a</sup>	Grant Priority <sup>a</sup>
1	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
2	6	High	High	Yes	Yes	No	Low	High
3	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
4	8	Low	High	No	Yes	No	Low	Medium
5	5	High	Medium	Yes	No	No	High	Low
6	10	High	Low	Yes	Yes	Yes	High	High
7	10	High	Low	Yes	Yes	Yes	High	High
8	3	Medium	Low	Yes	Yes	Yes	Medium	Medium
9	5	High	Medium	Yes	Yes	No	Low	High
10	5	High	Medium	Yes	Yes	No	Low	High
11	5	High	High	Yes	Yes	No	Low	High
12	5	High	Low	Yes	Yes	Yes	Medium	High
13	5	High	Low	Yes	Yes	Yes	High	Low
14	4	Low	Low	Yes	No	Yes	High	Medium

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



**Table 8-10. Analysis of Mitigation Actions**

Action Addressing Hazard, by Mitigation Type <sup>a</sup>						
Hazard Type	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Flood	ACHD 1, ACHD 2, ACHD 3, ACHD 4, ACHD 5, ACHD 6, ACHD 7, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 13, ACHD 14	ACHD 1, ACHD 2, ACHD 3, ACHD 4, ACHD 5, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 13, ACHD 14	ACHD 4, ACHD 5, ACHD 6, ACHD 12, ACHD 14	ACHD 1, ACHD 2, ACHD 3, ACHD 4, ACHD 5, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 13, ACHD 14	ACHD 2, ACHD 12	ACHD 2, ACHD 4, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 13
Earthquake	ACHD 6, ACHD 7		ACHD 6			
Severe Weather	ACHD 1, ACHD 2, ACHD 3, ACHD 4, ACHD 5, ACHD 6, ACHD 7, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 14	ACHD 1, ACHD 2, ACHD 3, ACHD 4, ACHD 5, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 14	ACHD 4, ACHD 6, ACHD 12, ACHD 14	ACHD 1, ACHD 2, ACHD 3, ACHD 4, ACHD 5, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 14	ACHD 2, ACHD 12	ACHD 2, ACHD 4, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12
Landslide	ACHD 6, ACHD 7, ACHD 14	ACHD 14	ACHD 6, ACHD 14	ACHD 14		
Dam Inundation	ACHD 6, ACHD 7, ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 13	ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 13	ACHD 6, ACHD 12	ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 13	ACHD 12	ACHD 8, ACHD 9, ACHD 10, ACHD 11, ACHD 12, ACHD 13
Drought	ACHD 4, ACHD 6, ACHD 7, ACHD 14	ACHD 4, ACHD 14	ACHD 4, ACHD 6, ACHD 14	ACHD 4, ACHD 14		ACHD 4
Volcano	ACHD 6, ACHD 7		ACHD 6			
Wildfire	ACHD 6, ACHD 7, ACHD 14	ACHD 14	ACHD 6, ACHD 14	ACHD 14		

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

