

**PART 6—
FLOOD CONTROL AND HIGHWAY
SPECIAL PURPOSE DISTRICT ANNEXES**

CHAPTER 22. ADA COUNTY HIGHWAY DISTRICT ANNEX

22.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

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22.2. JURISDICTION PROFILE

The Ada County Highway District (ACHD) owns and maintains 2,200 miles of roads and streets and approximately 600 bridges in Ada County with an estimated value of \$2.9 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 280 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.

- **Population Served**—384,656 as of 2009
- **Land Area Served**—1,054.99 square miles
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$45,672,471,726
- **Land Area Owned**—15,056 acres
- List of Critical Infrastructure/Equipment Owned by the Jurisdiction:
 - 2,200 miles of streets
 - 600 Bridges
- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$2.9 Billion.
- List of Critical Facilities Owned by the Jurisdiction:

– ACHD Adams Admin Building 3775 Adams St. + ACHD Urban Operations, 318 E. 37th St., 15.939 Acres + ACHD Cloverdale, 440 N. Cloverdale, 9.972 Acres	\$8,526,200
– Building Contents	\$2,943,357
– Equipment	\$11,469,557
– Material/Inventory	\$3,099,396
- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$26 Million

- **Current and Anticipated Service Trends**—Ada County experienced a population increase of 26.6% between 2000 and 2008 (source Wikipedia). That trend is expected to decrease as economic growth has slowed nationwide.

ACHD’s jurisdictional boundary is contiguous with the Ada County municipal boundary.

22.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 22-1 lists all past occurrences of natural hazards within the jurisdiction.

22.4. HAZARD RISK RANKING

Table 22-2 presents the ranking of the hazards of concern.

22.5. APPLICABLE REGULATIONS AND PLANS

The following existing codes, ordinances, policies or plans are applicable to this hazard mitigation plan:

- ACHD Capital Improvement Plan
- ACHD Policy

22.6. CLASSIFICATION IN HAZARD MITIGATION PROGRAMS

The jurisdiction’s classifications under various hazard mitigation programs are presented in Table 22-3.

22.7. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 22-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 22-5 identifies the priority for each initiative. Table 22-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

22.8. STATUS OF PREVIOUS PLAN INITIATIVES

Table 22-7 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.

22.9. FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

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).
- Flood—A consistent data set on flood risk that is both publically and politically supported that accurately reflects the true flood risk is desperately needed within the planning area.

22.10. ADDITIONAL COMMENTS

ACHD is currently investigating ways to form a Stormwater Utility to help with funding for maintenance of stormwater facilities and capital improvements.

TABLE 22-1. NATURAL HAZARD EVENTS		
Type of Event	Date	Preliminary Damage Assessment
Flood, Boise	N/A	Dec 15, 2009
Fire, SE Boise	N/A	Aug. 25, 2008
Flooding, Crane Creek & Hulls Gulch	N/A	September 1997
Flooding, Boise River (Eagle)	N/A	May 1993
Flooding, Cottonwood Creek	N/A	February 1986
Flooding, Boise, Garden City, Eagle Island	N/A	June 1983
Flooding, Highlands near Crane Creek, Polecat Gulch, Stewart Gulch and Cottonwood Creek north of Boise, and Threemile, Fivemile, Eightmile and Tenmile Creeks	N/A	January 1979

TABLE 22-2. HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Flood	(3x15) = 45
2	Earthquake	(2x18) = 36
3	Severe Storm	(3x11) = 33
4	Dam Failure	(1x18) = 18
5	Landslide	(2x8) = 16
6	Wildland Fire	(3x5) = 15
7	Volcano/Lahar	(1x6) = 6
8	Drought	(3x0) = 0

TABLE 22-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	N/A	N/A	N/A
Storm Ready	Yes	Gold	June 2001
Firewise	No, Parts of AC		Avimor 2007, Central Foothills NA 2010, Hidden Springs 2009, Warm Springs Mesa 2010

**TABLE 22-4.
HAZARD MITIGATION ACTION PLAN MATRIX**

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
Initiative #ACHD 1 —Pintail/Drake/Widgeon Flooding. Partner with DD4. Ongoing flooding problem for 10+ years. Hydrovac 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.						
Flood	Flood	Flood	Flood	Flood	Flood	Flood
Initiative #ACHD 2 —Dry Creek Bridge @ Floating Feather, w/o Eagle Rd Replacement. Replace structure to increase freeboard reduce restriction on Dry Creek.						
Flood, Earthquake	Flood, Earthquake	Flood, Earthquake	Flood, Earthquake	Flood, Earthquake	Flood, Earthquake	Flood, Earthquake
Initiative # ACHD 3 —Meridian Culvert Replacements. Partner with City of Meridian. Ninemile Creek at: E Watertower Lane, E Franklin Road, N Meridian Rd, Ten Mile Road, W Ustick Road. Tenmile Creek at: Locust Grove Rd. Eightmile Creek at: Overland Rd. Fivemile Creek at: S Topaz Ave, S Jade Ave, S Rackham Way, S Eagle Road, S Wells Street, E Pine Street, E Badley Ave						
Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather
Initiative # ACHD 4 —Snowflake & Crocus (Lakewood Sub., SE Boise). Realign storm drain from the back yards to the street, increase pipe size to reduce restriction. Ongoing problem for ACHD Drainage crews. Hydrovac truck must pump during routine storms.						
Flood, Severe weather	Flood, Severe weather	Flood, Severe weather	Flood, Severe weather	Flood, Severe weather	Flood, Severe weather	Flood, Severe weather
Initiative # ACHD 5 —Pave Dry Creek Rd., SH55/Seaman’s Gulch.						
All Hazards	All Hazards	All Hazards	All Hazards	All Hazards	All Hazards	All Hazards
Initiative # ACHD 6 —Create a Stormwater Utility						
Flood, Dam Failure, Earthquake, Severe Weather	Flood, Dam Failure, Earthquake, Severe Weather	Flood, Dam Failure, Earthquake, Severe Weather	Flood, Dam Failure, Earthquake, Severe Weather	Flood, Dam Failure, Earthquake, Severe Weather	Flood, Dam Failure, Earthquake, Severe Weather	Flood, Dam Failure, Earthquake, Severe Weather
Initiative # ACHD 7 —Remove sediment from all public street stormwater ponds (approx. 600)						
Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather	Flood, Severe Weather
Initiative #ACHD 8 —Support County-wide initiatives identified in Volume 1.						
All Hazards	All Hazards	All Hazards	All Hazards	All Hazards	All Hazards	All Hazards
Initiative #ACHD 9 —Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Volume 1.						
All Hazards	All Hazards	All Hazards	All Hazards	All Hazards	All Hazards	All Hazards

**TABLE 22-5.
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
1	5	High	Medium	Yes	Yes	No	High
2	5	High	Medium	Yes	Yes	No	High
3	5	High	Medium	Yes	Yes	No	High
4	4	High	Medium	Yes	Yes	No	High
5	6	High	Low	Yes	N/A	Yes	High
6	5	High	High	Yes	Yes	No	High
7	4	High	Medium	Yes	No	Yes, long term	Medium
8	10	Medium	Low	Yes	No	Yes	High
9	10	Medium	Low	Yes	Yes	Yes	High

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

**TABLE 22-6.
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	1,4,6		8, 9		1,4,5,6	1,4,6
Drought			8, 9			
Earthquake	6	2	8, 9	1,2,3,4,5,6,7	1,2,3,4,5,6,7	2,6
Flood	1,2,3,4,6,7	2	8, 9	1,2,3,4,5,6,7	1,2,3,4,5,6,7	1,2,3,4,6
Landslide	5,6		8, 9	5	5	6
Severe Storm	1,2,3,4, 6	3,4	8, 9	1,2,3,4,5,6,7	1,2,3,4,5,6,7	1,2,3,4,6
Volcano/Lahar			8, 9			
Wildland Fire			8, 9		1,2,3,4,5,6	

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 21-7.
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		Maintain community’s compliance and good standing under the National Flood Insurance program.
8.1.h			X	Rural signage (road signs & rural fire district boundary signs) improvements across the county.
8.1.i	X			Enforce a policy to engineer bridge and culvert crossings on canals with the same standards as river and stream bridges and culverts.
8.1.j			X	Complete All Hazards Mitigation Plan for additional Hazards
8.1.k		X		Form committee to examine critical infrastructure & shelters to make them conform to population needs and potential response during emergencies.
8.2.a			X	Assess and hardwire emergency facilities and shelters throughout Ada County for use with a portable generator.
8.2.b		X		This is now addressed by Objective #10
8.2.c	X			Encourage residents in high risk areas (Flood zones, Boise Foothills) to purchase NOAA Weather Alert Radios.
8.2.d		X		This is now addressed by Objective #2.
8.2.e	X			Implement the community detailed recommendations listed in this plan by hazard.
8.2.f		X		This is now addressed by Objective #10.
8.2.g	X			Evaluate the 3,000+ structures in Ada County which are located in the flood zone.
8.2.h		X		Reinforce the 23 well intakes in the county which are within the flood zone.
8.2.i		X		This is now addressed by Objective #3.
8.2.j			X	Install audible warning system (sirens) in each city hall building in the county for emergency warning system.
8.3.a		X		This is now addressed by Objective #2.
8.3.b		X		This is now addressed by Objective #2

**TABLE 21-7.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
8.3.c		X		This is now addressed by Objective #2.
8.3.d		X		Conduct feasibility study to install debris catchment structures in the Boise River system upstream of critical access crossings, and develop program for maintaining these structures during flooding events with high debris flow.
8.3.e		X		This is now addressed by Objective #2.
8.3.f		X		This is now addressed by Objective #7.
8.3.g	X			Widen Seaman Gulch Road to serve as a primary evacuation route. ACHD and HS developer have completed the required widening.
8.4.h		X		Stabilize, widen, and pave Dry Creek Road. Will be done by ACHD maintenance and operations summer, 2011.
8.4.i		X		This is now addressed by Objective #10
8.4.j			X	Expand partners to include Irrigation Districts in the next update.
8.4.k			X	Enlarge culverts and place debris catchment upstream of the railroad crossing in Meridian.
8.4.a		X		Obtain portable generators for use in Ada County during power outages and other emergency situations.
8.4.b			X	Acquire two portable generators for the community of Kuna.
8.4.c		X		This is now addressed by Objective #7
8.4.d		X		This is now addressed by Objective #10
8.4.e		X		Maintain snow removal equipment and schedule for communities and primary transportation routes.