

CHAPTER 10. EAGLE FIRE PROTECTION DISTRICT ANNEX

10.1. HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact

Mike Winkle, Fire Chief
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Alternate Point of Contact

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10.2. JURISDICTION PROFILE

Eagle Fire Protection District (EFD) provides fire suppression, EMS, hazardous materials mitigation, and rescue services to 75 square miles with an assessed valuation of \$2,375,077,643 and a population of approximately 25,000. The District is a mix of urban, rural, interface and wildland areas. The department employs 37 Career personnel and 45 volunteer firefighters who respond to approximately 1300 calls for service per year. A three-member Board of Commissioners governs this District and will assume the responsibility for the adoption and implementation of this plan. The following is a summary of key information about the jurisdiction:

- **Population Served**—25,000 as of 2010
- **Land Area Served**—Approximately 75 square mile
- **Value of Area Served**—The estimated value of the area served by the jurisdiction is \$2,375,078,000
- **Land Area Owned**—3 acres
- List of Critical Infrastructure/Equipment Owned by the Jurisdiction:
 - Four Type 1 Engines \$1,200,000
 - One 85’ Quint Platform \$1,000,000
 - One Heavy Rescue \$850,000
 - One Water Tender \$175,000
 - Four Type 6 Engines \$210,000
 - Six Command Vehicles \$100,000
 - One Water Rescue Unit \$150,000
- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$3,685,000
- List of Critical Facilities Owned by the Jurisdiction:
 - EFD Station #1—966 E. Iron Eagle Dr. \$2,500,000
 - EFD Station #2—3180 E. Floating Feather Rd \$1,000,000
 - EFD Station #3—825 N. Cactus Creek \$1,500,000

- **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$5,000,000.
- **Current and Anticipated Service Trends**—The Eagle Fire Protection District has experienced 20% annual growth over the last five years. The District’s call volume has averaged 1,350 calls per year during this same time period. The District anticipates a decrease in new home construction starts in the future. However, we predict calls for service will maintain at approximately 1,300 per year.

The Eagle Fire Protection District is located in the North East corner of Ada County. The District provides service to the City of Eagle and unincorporated areas of Ada, Boise, and Gem Counties. The District is bordered by Boise to the south, Garden City to the east, and the Star Joint Fire Protection District to the west. The district’s boundaries are shown on the map at the end of Chapter 1.

10.3. JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 10-1 lists all past occurrences of natural hazards within the jurisdiction.

10.4. HAZARD RISK RANKING

Table 10-2 presents the ranking of the hazards of concern.

10.5. APPLICABLE REGULATIONS AND PLANS

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

- Ada County Flood Response Plan, 2010
- Ada County Wildfire Response Plan, 2010
- The District must adhere to all applicable codes and regulations enforced by federal, state and local authorities with a sphere of influence within the District service area.

10.6. CLASSIFICATION IN HAZARD MITIGATION PROGRAMS

The jurisdiction’s classifications under various hazard mitigation programs are presented in Table 10-3.

10.7. HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED INITIATIVES

Table 10-4 lists the initiatives that make up the jurisdiction’s hazard mitigation plan. Table 10-5 identifies the priority for each initiative. Table 10-6 summarizes the mitigation initiatives by hazard of concern and the six mitigation types.

10.8. STATUS OF PREVIOUS PLAN INITIATIVES

Table 10-7 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.

10.9. FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Future Need #1—Wildland Urban Interface Mitigation

In continuous partnership with the Healthy Hills Initiative, and keeping within the mission statement of the Ada County Wildland Urban Interface Mitigation Plan’s Mission Statement, the Eagle Fire Department would like to continue to reduce the threat of a wildland fire through the following:

- #1—To provide fire safety, fire prevention and Firewise education to our neighborhoods, schools and community via development of demonstration areas, web pages and signage.
- #2—To reduce the determined vegetation which can fuel a rapid spreading wildland fire. We can accomplish this by the following fuel reduction strategies:
 - Mechanical
 - Grazing
 - Herbicides
 - Scientific based vegetation change from annual invasive to native plants.
- #3—Rehabilitate areas impacted by wildfire for wildlife, to sustain access to recreational trails and to prevent erosion.

Future Need #2—Flood Mitigation

The Eagle Fire Protection District and the City of Eagle are impacted by two major natural waterways; these are the North and South fork of the Boise River and Dry Creek Drainage. Both of these rivers have significant residential development along their banks and are prone to flooding during high snow-pack years. In addition to the threat of flooding due to normal precipitation, the Boise River would be the main conveyance in the event of a Dam failure to any of the three major Dams upstream of the District.

Currently, only the south Channel of the Boise River has instrumentation to monitor river flows. The District would like to add monitoring stations to the North Channel of the Boise River at the Eagle Rd bridge and add a monitoring station on the Dry Creek Drainage at the Eagle Rd bridge.

Future Need #3—Emergency Operation Center (EOC)

Eagle Fire Station #1 is the location of the District and the City of Eagle’s EOC. This past year Eagle Fire Station #1 was selected and approved for funding by Ada County City Emergency Management to install the vast majority of the technology needs for a functional EOC. To complete this project and ensure security and communications for the EOC, the District would like to add both VHF and 700 MHz radios and antennas to the EOC. The final items to ensure secure a working environment for the EOC, the District will need to install either punch-code or card-swipe locks to all exterior accesses to the EOC.

Type of Event	Date	Preliminary Damage Assessment
Flooding	2/21/2011	
Wildland Fire	07/28/2010	
Wildland Fire	07/11/2010	
Wildland Fire	08/29/2009	
Severe Storm	01/02/2009	
Wildland Fire	09/18/2008	
Wildland Fire	08/08/2006	
Severe Storm	07/04/2006	
Flooding	05/24/2006	
Flooding	04/14/2006	
Flooding	04/05/2006	
Wildland Fire	06/22/2004	
Severe Storm	08/02/2004	
Severe Storm	01/08/2004	
Wildland Fire	07/08/2002	

Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Flood	54
2	Wildland Fire	36
3	Severe Storm	27
4	Dam Failure	18
5	Earthquake	18
6	Drought	18
7	Landslide	12
8	Volcano	6

TABLE 10-3. COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Public Protection	Y	3/9	N/A
Storm Ready	N	N/A	N/A
Firewise	N	N/A	N/A
Tsunami Ready	N/A	N/A	N/A

TABLE 10-4. 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 EFD01 —To continue to provide fire safety, fire prevention and Firewise education to our neighborhoods, schools and community via web pages, signage and outreach.							
New and Existing	Wildfire	8, 9	Eagle Fire	Low	Firewise Grant, Local Funding	Short Term	No
Initiative EFD02 —Partnering with the Healthy Hills Coalition develop demonstration areas using low bio-mass native vegetation that will decrease fire spread and damage from wildland fire.							
New and Existing	Wildfire	5, 8, 9	Eagle Fire	Medium	Firewise Grant, PDM Grant, Assistance to Firefighters Grants (AFG), Local Funding	Short Term	No
Initiative EFD03 —To reduce the determined vegetation which can fuel a rapid spreading wildland fire through the means of mechanical mowing of invasive grass and brush in the wildland urban interface.							
New and Existing	Wildfire	5, 10	Eagle Fire	Medium	PDM Grant, AFG, Local Funding	Short Term	No
Initiative EFD04 —Partnering with adjoining jurisdictions in purchasing specialized equipment to reduce and eliminate invasive grasses through the means of applying herbicides and replanting of fire resistant native plant species in the wildland urban interface area(s)							
New or Existing	Wildfire	5, 9, 10	Eagle Fire	Low	Local Funding, PDM Grant	Short Term	No
Initiative EFD05 —Partnering with adjoining jurisdiction rehabilitate areas impacted by wildfire for wildlife while sustaining access to recreational trails and to prevent erosion.							
New and Existing	Wildfire, Landslide	5, 9	Eagle Fire	Low	AFG, Local Funding	Short Term	No

**TABLE 10-4.
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 EFD06 —Partner with Federal Agencies to install electronic flow monitoring stations on the North Channel of the Boise River Eagle Rd Bridge and Dry Creek Drainage at the Eagle Rd Bridge. Both monitoring stations shall be capable of feeding data to USGS stream flow web site, or other applicable collection sources.							
New and existing	Flood	2, 7, 8, 9	Eagle Fire, Federal Partners	Medium	FMA, PDM, Local Funding	Short Term	No
Initiative EFD07 —Host Community wide open house to increase public awareness of all hazards within the Eagle Fire Protection District and response capabilities of the jurisdiction.							
New and Existing	All Hazards	8	Eagle Fire, Cooperating County Agencies	Low	Local Funding	Short Term	No
Initiative EFD08 —Partner with appropriate local authorities to establish right-of-way and construct a roadway that will allow access on to State Hwy 44 from Plaza Dr. to enhance response capabilities for the Eagle Fire Department and Ada County Sheriff’s Department.							
New and Existing	All Hazards	1, 9, 10	Eagle Fire, City of Eagle, ITD, ACHD	High	Local Funding	Long Term	No
Initiative EFD09 — Partner with the County, Eagle, and West Valley Little League in the development of a defensible open space use in the urban wild land interface area in the vicinity of Horseshoe Bend Rd, and Floating Feather Rd (Eagle Cycle Park). This use shall strive to mitigate the impacts of wildfire and stormwater runoff in a multi-objective, multi-use manner.							
New and Existing	Wildfire, Stormwater runoff, Landslide	4,6,9	Eagle, Ada County, EFD, West-Valley Little League	High	FEMA Mitigation Grant Funding, Fire grants, West Valley Little League	Long term, depends on funding	No
Initiative EFD10 —Support County-wide initiatives identified in Volume 1							
New & Existing	All Hazards	All	EFD, ACCEM	Low	District Funds	Short Term Ongoing	No
Initiative EFD11 —Continue to support the implementation, monitoring, maintenance, and updating of the Plan, as defined in Volume 1.							
New & Existing	All Hazards	All	EFD, ACCEM	Low	District Funds, FEMA Mitigation Grant Funding for 5-year update	Short Term Ongoing	No

**TABLE 10-5.
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
EFD01	2	Medium	Low	Yes	Yes	Yes	High
EFD02	3	Medium	Medium	Yes	Yes	Yes	Medium
EFD03	2	High	High	Yes	Yes	No	Medium
EFD04	3	Medium	Medium	Yes	Yes	No	Medium
EFD05	2	Medium	Medium	Yes	Yes	No	Low
EFD06	4	High	Medium	Yes	Yes	No	High
EFD07	1	Low	Low	Yes	Yes	Yes	High
EFD08	3	High	Medium	Yes	Yes	No	High
EFD09	3	High	High	Yes	Yes	No	Medium
EFD10	All	High	Low	Yes	No	Yes	High
EFD11	All	High	Low	Yes	No	Yes	High

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

**TABLE 10-6.
ANALYSIS OF MITIGATION INITIATIVES**

Initiative Addressing Hazard, by Mitigation Type						
Hazard Type	1. Prevention	2. Property Protection	3. Public Education and Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Flood	EFD08, EFD10, EFD11	EFD08	EFD06, EFD07, EFD10, EFD11	EFD06, EFD09	EFD06, EFD08	EFD09
Wildland Fire	EFD08, EFD10, EFD11	EFD02, EFD03, EFD08	EFD01, EFD02, EFD03, EFD07, EFD10, EFD11	EFD02, EFD03, EFD04, EFD05, EFD08, EFD09	EFD03, EFD04, EFD08	EFD09
Severe Storm	EFD08, EFD10, EFD11	EFD08	EFD07, EFD10, EFD11	EFD09	EFD08	EFD09
Dam Failure	EFD08, EFD10, EFD11	EFD08	EFD07, EFD10, EFD11			
Earthquake	EFD08, EFD10, EFD11	EFD08	EFD07, EFD10, EFD11			
Drought	EFD10, EFD11		EFD07, EFD10, EFD11			
Landslide	EFD10, EFD11		EFD07, EFD10, EFD11	EFD05, EFD09		EFD09
Volcano	EFD10, EFD11		EFD07, EFD10, EFD11			

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 10-7.
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		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
8.2.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.
8.2.i				This action is now covered by Objective 3

**TABLE 10-7.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
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
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.

**TABLE 10-7.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
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.
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.

**TABLE 10-7.
PREVIOUS ACTION PLAN IMPLEMENTATION STATUS**

Action #	Action Status			Comments
	Completed	Carry Over to Plan Update	Removed; No Longer Feasible	
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.
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.