



ANNEX A: UNINCORPORATED SUMMIT COUNTY

Jurisdictional annexes provide specific information unique to each jurisdiction participating in the hazard mitigation plan. For unincorporated Summit County, countywide information related to sections A.1 Community Profile, A.2 Hazard Identification and Profiles, and A.3 Vulnerability Assessment is addressed previously in the main plan. The location of this information is referenced below. The remainder of this annex focuses on the Capability Assessment and Mitigation Strategy unique to the County government.

A.1 Community Profile

Community profile information and the base map for Summit County are provided in Section 1.5 Planning Area Profile.

A.2 Hazard Identification and Profiles

Countywide hazard identification and profiles information can be found in Section 3.1 Hazard Identification and Section 3.2 Hazard Profiles.

A.3 Vulnerability Assessment

The vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of moderate or high significance and estimates potential losses where data is available. Facilities owned by the County are inventoried in Table A.1. Other countywide vulnerability information is covered in Section 3.3 Vulnerability Assessment in the main plan.

Table A.1. Unincorporated Summit County—Critical Facilities and Other Community Assets

Name of Asset	Address	Replacement Value (\$)	Hazard Concerns
Breckenridge Area			
Courthouse	208 E. Lincoln	2,684,337	
Courthouse Addition	208 E. Lincoln	687,156	
Justice Facility	501 Park Drive	13,202,471	
District Attorney's Offices	1760 Airport Road Unit A	594,776	
Library	504 Airport Road	803,505	
Ambulance Building	0143 CR 450	238,185	
Sheriff Storage Barn	0192 CR 450	66,843	
Building and Grounds Shop	105 N. French Street	47,737	
Building and Grounds Office	106 N. Ridge Street	345,784	
Road and Bridge Maintenance Shop	0192 CR 450	252,569	
Tyrollean Radio Site	Barney Ford Hill	23,683	

Name of Asset	Address	Replacement Value (\$)	Hazard Concerns
High School Radio Site	0059 CR 1	2,783	
Copper Mountain Area			
Copper Mountain Radio Site	SE of 3371 Hwy 91, Parcel 3	29,621	
Dillon Area			
Snake River Wastewater Treatment Plant	4344 Swan Mountain Road	21,411,693	
Snake River Wastewater Treatment	0297 Summit County Road 120	1,277,528	
South AWT	4344 Swan Mountain Road	82,498	
Snake River Wastewater Treatment Plant Digester	0297 Summit County Road 120	219,475	
Wastewater Treatment Plant	4344 Swan Mountain Road	2,104,672	
Sewage Lift Station	4533 Swan Mountain Road	48,333	
Material Recovery Facility	683 Landfill Road	2,878,001	
Water Storage Tank	642 Landfill Road	713,246	
Landfill Maintenance Garage	725 Landfill Road	1,849,981	
Frisco Area			
Ambulance Search and Rescue	128 CR 1004	401,887	Wildfire
Road and Bridge Building Department	128 CR 1004	383,009	Wildfire
Road and Bridge Main Shops	128 CR 1004	847,155	Wildfire
Storage	187 CR 1004	264,840	Wildfire
Sand Storage	218 CR 1004	74,006	Wildfire
Bus Garage	0222 SCR 1004	754,469	Wildfire
Library/Administration	0037 CR 1004	14,082,777	Wildfire
Emergency Services Facility	0227 CR 1003	2,348,292	Wildfire
Transfer Center	1010 Meadow Drive	626,000	
Animal Shelter, Classroom, Office	0191 CR 1004	1,702,308	Wildfire
Community and Senior Center	0151 CR 1004 Peak 1 Boulevard	3,661,946	Wildfire
Summit County Medical Offices	360 Peak One Drive	6,856,461	Wildfire
St. Anthony Summit Medical Center	340 Peak One Drive	N/A	Wildfire
Summit County Offices (2nd Floor)	360 Peak One Drive	870,000	Wildfire
Heeney Area			
Summit County Barn	1294 CR 30	80,864	
Temporary Fire Department Parking Garage	6631 CR 30	80,046	
Heeney Radio Site	CR 30 at Willows Campground	24,827	
Keystone Area			
County Maintenance Building	1252 Keystone Ranch Road	96,276	
Landfill Maintenance/Storage Building	Landfill Road	13,356	
Snake River Radio Site	22393 Highway 6	939	
Silverthorne Area			
Search and Dive Rescue	222 Adams	79,830	
North Branch Library	651 Center Circle	3,197,017	
Wilderness Radio Site	Ryan Gulch Road at Wilderness	93,894	

Source: Summit County Office of Emergency Management

A.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

Regulatory Mitigation Capabilities

Table A.2 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in Summit County.

Table A.2. Summit County—Regulatory Mitigation Capabilities

Regulatory Tool (Ordinances, Codes, Plans)	Yes/No	Comments
Master Plan	Yes	2009
Zoning Ordinance	Yes	Summit County Development Regulations
Subdivision Ordinance	Yes	Summit County Development Regulations
Growth Management Ordinance	Yes	Summit County Development Regulations
Floodplain Ordinance	Yes	Floodplain Overlay District
Other Special Purpose Ordinance (Stormwater, Steep Slope, Wildfire)	Yes	Chapter 44 of the County Building Code, Fire Mitigation Standards for New Development Development Code Chapters 6 and 7 include erosion control and revegetation requirements
Building Code	Yes	Version: 2006 International Building Code
Erosion or Sediment Control Program	Yes	
Stormwater Management Program	Yes	All large scale development is required to have drainage designed to handle the 25-year storm event. Detention must be provided that will release water at the 25-year historic rate.
Site Plan Review Requirements	Yes	
Capital Improvements Plan	No	
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	In process of updating to National Response Framework
Other Special Plans	Yes	Summit County Community Wildfire Protection Plan
Flood Insurance Study or Other Engineering Study for Streams	Yes	FEMA Flood Insurance Study, November 16, 2011
Elevation Certificates	Yes	

Summit County Planning developed the matrix in Table A.3 listing their hazard mitigation measures. More detailed information on mitigation related plans and policies follows the matrix.

Table A.3 Development Constraints, County Concerns, and Mitigation Measures

Constraint	County Concerns	Mitigation
Flood Fringe	Flood hazards to structures; Public health, safety, and welfare	A. Compliance with County Floodplain Regulations (See Section 4100)
Floodway	Flood hazards to structures; Public health, safety, and welfare	A. Compliance with County Floodplain Regulations (See Section 4100)
Geologic Hazard Areas	Avalanche paths; Landslide areas; Rock falls; Debris flows; Mudflows; Unstable slopes or soils; Seismic effects; Ground subsidence radioactivity	A. Avoiding placing any structures on areas subject to geologic hazards
		B. Submitting geotechnical report identifying hazards and recommending methods of construction to alleviate hazards; designing structures in accordance with recommendations contained in geotechnical report (See Chapter 6)
		C. Providing grading and foundation plans prepared by a registered professional engineer (See Chapter 6)
		D. Complying with recommendations of the State Geologic Survey (See Chapter 8)
		E. Modifying land uses so that structures are minimized or eliminated
		F. Clustering development to avoid hazard areas
Slopes Exceeding 30 Percent	Amount of site disturbance; Visual scarring; Slope stability; Soil erosion; Release of phosphorus; Wildfire potential (See also wildfire as constraint)	A. Avoiding placing such items as parking lots which require large, flat-surfaced areas on steep slopes
		B. Modifying land uses so site disturbance is minimized
		C. Proposing smaller scale rather than larger scale development in order to minimize the amount of site disturbance
		D. Designing structures so they are stepped or otherwise fit with the terrain
		E. Minimizing the extent of roads
		F. Clustering development to avoid steep slopes
		G. Providing financial commitment to, and implementation of, a revegetation program (Required by Chapter 5, 7 and Section 3600)
Wetlands	Degradation of natural environment; Loss of wildlife habitat; Loss of cleansing action of wetlands; Disruption of natural corridors; Loss of amenity in project	A. Proposing land uses which are not disruptive to wetlands
		B. Clustering development to avoid wetlands areas
		C. Complying with 404 permit procedures
		D. Replacing wetlands on an acre for acre basis within same ecosystem
		E. Replacing wetlands on a 2 for 1 basis outside ecosystem but within county
		F. Contributing sufficient funds to convert existing private wetlands in the unincorporated area to public domain on a 2 for 1 basis
Wildfire	Fire hazard to structures; Public health, safety, welfare	A. Submitting forest management plan approved by Colorado State Forest Service, and implementing measures needed to mitigate or eliminate hazard (required for areas of moderate or severe hazard by Chapter 8)
		B. Providing multiple points of access
		C. Using fire retardant roof covering materials in accordance with the building code
		D. Installing fire sprinkler system

Source: Summit County Planning Department

Countywide Comprehensive Plan, 2009

The Summit County Countywide Comprehensive Plan serves as the County's policy guidance and directs decisions that affect the physical and socioeconomic development of the County. The plan's overall vision is to "preserve and enhance our vibrant, attractive, and prosperous mountain community where people choose to live, work, recreate, and visit." Goals and policies related to hazard mitigation include the following:

Environment Element

- Goal A: Protect and preserve environmentally sensitive areas.
 - Policy/Action 6: The County should work cooperatively with homeowner groups and the state and federal forest services to promote healthy and naturally diverse forests while reducing wildfire hazards.
- Goals B-F: Wetland preservation and enhancement.
- Goal H: Protect and enhance the quality and quantity of water resources in the County.
 - Policy/Action 1: Reduce water consumption and manage water resources in a more sustainable manner.
 - Policy/Action 2: Development and other land use activities (e.g., highway operations and industrial activities) should avoid water quality impacts from erosion and sedimentation and should not result in degradation of water quality as measured by Colorado's Antidegradation Policy.
 - Policy/Action 8: Ensure that new development does not disturb surface or subsurface hydrologic flows to the extent that recharge of nearby wetlands and streams are adversely affected.
 - Policy/Action 14: Support projects that restore stream channels and natural conditions, provide erosion control, and improve fish and wildlife habitat.

Land Use Element

- Goal D: Guide the appropriate development of land through the County's master plans and development regulations.
 - Policy/Action 3.1: To the extent practicable, retain trees and forested areas while providing protection of the resources listed above and while allowing for forest management practices necessary for forest health and wildfire prevention.

Design and Visual Resources Element

- Goal E: Avoid or minimize development impacts on steep hillsides and ridgelines.
 - Policy/Action 1: Development on ridgelines and steep slopes should be avoided wherever possible. Where no feasible alternative exists, buildings on ridgelines and slopes should be located and designed so that the existing visual dominance of the natural landform, vegetation and topography is maintained.

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- Policy/Action 2: Minimize the need for grading, earth moving, vegetation removal, and site disturbance related to development on sloped areas.
 - Policy/Action 3: Grading or earth moving to create a flat building pad on a slope should be discouraged; instead, buildings should be stepped to fit with the natural terrain.

Watershed Basin Master Plans

Each of the County's four watershed basins, Upper Blue, Snake River, Ten Mile, and Lower Blue, has a basin master plan that provides further specific direction on land use decisions within the basin. Within each basin, there may be a subbasin plan to address unique circumstances on a neighborhood or regional scale.

Summit County Land Use and Development Code

The Summit County Development Code is the legal framework outlining policies for development projects within the County's jurisdiction. It is organized under 16 chapters and various subsections. Code ordinances related to hazard mitigation are described below:

Zoning Regulations

3200 Rezoning Policies

Summit County has established policies that apply whenever a zoning amendment (rezoning) is proposed in the unincorporated area of the County. These Rezoning Policies are intended to ensure that land with development constraints is avoided in accordance with the policies contained herein, and that development contemplates and is designed in a manner consistent with the terrain and natural features of the site and is compatible with existing development in the vicinity.

- **3202.02 Development Constraints:** An applicant requesting a zoning amendment that may impact land with development constraints shall provide a surveyed existing conditions plan depicting all of the following constraints, unless the Planning Department waives mapping such environmental constraints:
 - 1. Slopes of greater than 30 percent.
 - 2. Areas subject to geologic hazards including avalanches, landslides, rock falls, mud flows, unstable slopes or soils, seismic effects, ground subsidence or radioactivity.
 - 3. Any regulatory floodway or flood fringe area as depicted on the County's Floodplain Overlay District Maps.
- **3202.06 Wildfire Hazard Areas:** Rezoning Policies for wildfire hazard areas state that in determining appropriate densities for a particular property, the Board of County Commissioners will take into account: 1) the wildfire hazard; 2) the potential impact to the public health, safety and welfare; 3) wildfire mitigation measures as required and/or allowed by the County; and 4) the proximity of the proposed development site to existing fire stations and the corresponding response zone. Development projects seeking a zoning amendment

shall ensure that wildfire hazard areas do not pose an undue risk to the public health, safety and welfare. As a part of a zoning amendment application, the County may require:

- A. The submittal of a forest management plan approved by the Colorado State Forest Service that includes proposed mitigation for any wildfire hazard area.
- B. Provisions for multiple points of access.
- C. Installation of fire suppression systems.
- D. Other measures as deemed necessary to reduce the wildfire hazard.

Zoning Regulations/Overlay Districts

4100 Floodplain Overlay District

The Summit County Board of County Commissioners (BOCC) finds there are areas within Summit County subject to flooding which may cause serious property damage and threaten the health, safety and welfare of its residents. The imprudent use and occupation of these flood hazard areas will pose a continuing danger to life and property unless appropriate regulations are implemented concerning the use, development and occupation of these areas. The purpose and intent of these Floodplain Regulations is as follows:

- A. To reduce the hazard of floods to life and property through:
 - 1. Prohibiting certain uses that are hazardous to life or property in time of flood from locating in the floodplain;
 - 2. Restricting the development of certain uses in the floodplain that are hazardous to public health in time of flood;
 - 3. Restricting the development of certain uses in the floodplain which are especially susceptible to flood damage, so as to alleviate hardship and eliminate demands for public expenditures for relief and protection; and,
 - 4. Requiring permitted floodplain uses, including but not limited to public facilities that serve such uses, to be protected against floods by requiring floodproofing and general flood protection at the time of initial construction.
- B. To protect those who may occupy areas of the floodplain through:
 - 1. Regulating the manner in which structures and developments designed for human occupancy may be constructed and developed so as to minimize danger to human life within such structures;
 - 2. Regulating the method of constructing water supply and sanitation systems so as to prevent disease, contamination and unsanitary conditions resulting from inundation in time of flood;
 - 3. Regulating the location and method of constructing streets and bridges so as to prevent damage in time of flood; and,
 - 4. Requiring the provisions of this section and maps delineating floodplain areas be made available to the public so as to protect individuals from purchasing floodplain lands for purposes that are not suitable.

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- C. To protect the public from the burden of avoidable financial expenditures for flood control and relief by regulating uses within floodplain areas so as to produce a method of construction and pattern of development which will minimize the probability of damage to property and loss of life or injury to the occupants of flood hazard areas.
 - D. To protect and enhance the storage capacity of floodplains and to assure retention of sufficient floodway area to convey flood flows, which can reasonably be expected to occur by:
 - 1. Regulating filling, dumping, dredging, and alteration of drainage channels;
 - 2. Prohibiting excessive encroachments; and,
 - 3. Encouraging uses such as agriculture, recreation, and parking in floodplains.

The above regulations were reviewed and revised to conform with the updated State Floodplain Rules and Regulations that became effective statewide on January 14, 2011.

Subdivision Regulations

Section 8100 Design Criteria and Required Improvements includes separate sections on Protection of the Natural Environment, Areas Subject to Environmental Hazard, Drainage, Fire Protection, and Soil Suitability criteria and requirements in new subdivisions.

Fire Hazard Mitigation Requirements for New Construction

Chapter 44 of the Summit County Building Code establishes minimum design and construction standards for the protection of life and property from fire within the wildland-urban interface. These provisions are meant to aid in the prevention and suppression of fires and lessen the hazards to structures from wildland fires as well as the hazards to wildlands from structure fires. New homes and remodels in an area rated as moderate or high fire hazard risk in unincorporated Summit County must go through a wildfire mitigation inspection process.

Summit County Community Wildfire Protection Plan, 2006, Revised 2013

The purpose of the Summit County Community Wildfire Protection Plan is to establish a focused set of goals, policies, and implementation strategies specific to wildfire prevention and mitigation. The plan is a joint effort of the County, fire districts, State and Federal Forest Service, towns, the Northwest Colorado Council of Governments, and others. The document is organized into twelve sections and three appendices that include maps of focus areas for reducing wildfire risk and mitigation and implementation strategies. Appendix C details property specific implementation measures that support the goals of the overall document. The plan will be continuously updated.

Wildfire Evacuation Plan, 2007

The Summit County Wildfire Evacuation Plan was created to establish a set of policies and protocol in response to wildfire occurrence. A guiding principle of the plan is that the decision to

evacuate properties should be left at the discretion of County residents themselves whenever possible. The plan outlines the official County wildfire notification system and provides specific evacuation guidelines for families in the event of a wildfire that threatens homes.

Summit County Public Health Emergency Operations Plan, 2008

This plan was developed for the Summit County Public Health Department to promote a system to save lives, protect public health and the environment, alleviate damage and hardship, and to reduce vulnerability within Summit County. It provides guidance on overall emergency preparedness and concept of operations, roles, and responsibilities; Summit County Public Health Department emergency response organization; plan implementation process; and administrative, training, and exercising requirements.

Administrative/Technical Mitigation Capabilities

Table A.4 identifies the personnel responsible for activities related to mitigation and loss prevention in Summit County.

Table A.4. Summit County—Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/Engineer with Knowledge of Land Development/Land Management Practices	Yes	Planning Department Engineering Department	
Engineer/Professional Trained in Construction Practices Related to Buildings and/or Infrastructure	Yes	Engineering, Building, Inspection Departments	
Planner/Engineer/Scientist with an Understanding of Natural Hazards	Yes	Engineering Department	
Personnel Skilled in GIS	Yes	GIS Department	
Full-Time Building Official	Yes	Building Inspection Department	
Floodplain Manager	Yes	Engineering Department/County Engineer	
Emergency Manager	Yes	Sheriff's Office/Emergency Manager	Full-time
Grant Writer	No	Several departments have staff that write grants as part of their work, including Transit Summit Stage, Public Health, and Youth and Family Services	
Other Personnel	Yes	Fire Mitigation Specialist	
Warning Systems/Services	Yes	Summit County Communications Center	Reverse 911, Emergency Alert System, NOAA All-Hazards Radio, local radio, citizen text messaging system (acquiring)

Prior to 2012, Summit County had only two National Weather Service forecast points. As a result of the 2011 snowpack runoff year, Summit County OEM asked Boulder NWS to add three new forecast locations for flood advisories, including:

- On the Tenmile River traveling through Frisco
- On the Snake River traveling through Keystone
- On the Straight Creek which feeds into the lower Blue River below the Dillon Dam. This adds to the river flow previously only accounting for the release from Dillon Reservoir.

Fiscal Mitigation Capabilities

Table A.5 identifies financial tools or resources that Summit County could potentially use to help fund mitigation activities.

Table A.5. Summit County—Fiscal Mitigation Capabilities

Financial Resources	Accessible/ Eligible to Use
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
Fees for Water, Sewer, Gas, or Electric Services	No
Impact Fees for New Development	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activities	No
Withhold Spending in Hazard Prone Areas	Yes

Mitigation Outreach and Partnerships

Summit County is involved in the following mitigation related outreach programs and partnerships:

- Each spring, the governments of Summit County, Breckenridge, Dillon, Frisco, and Silverthorne distribute a packet of information to inform the communities about how to prepare for possible high water in May and/or June resulting from snowmelt.
- Wildfire mitigation work is a cooperative effort of the Summit County Government and the four local fire districts: Lake Dillon Fire Protection District, Red, White, and Blue Fire Protection District, Snake River Fire Protection District, and Copper Mountain Fire Protection District. The county has an appointed Wildfire Council, has adopted a Community Wildfire Protection Plan (CWPP), and for the past three years the Board of County Commissioners has dedicated funding for wildfire risk reduction projects.
- The County operates an avalanche information line during avalanche season and works with the Colorado Avalanche Information Center.
- The County promotes fire education programs for the public and in schools.

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- The Environmental Health Department regularly educates the public on disease prevention, including West Nile Virus and food safety.
 - Shortly after this plan was initially completed the County was able to successfully obtain a FEMA Pre-Disaster Mitigation Grant for defensible space near Keystone Ski Resort. The grant was awarded to the County in September 2010. Keystone Resort selected a contractor and entered into an additional contract with Summit County to manage the project and all site work. The project resulted in 48 acres of defensible space being created on private property throughout the Keystone Resort. This project was tied into other mitigation projects and resulted in over 3,890 high hazard trees being removed from the forest fuels. Summit County nominated Keystone Resort for the outstanding volunteer recognition award from the Colorado Emergency Management Association for their efforts on the project.
 - Summit County, in partnership with the Summit County Wildfire Council, has created a sustainable wildfire mitigation funding source and made great strides in its fuels reduction projects in an effort to mitigate wildfire hazards; a direct result of implementation of Summit County mitigation actions #2 and #3. In 2011 the Summit County Wildfire Council recognized that an unfulfilled funding need existed for projects identified in the Community Wildfire Protection Plan (CWPP) that did not meet the criteria for the State's Hazardous Fuels Reduction Grant Program. That recognition has led to the creation of the CWPP Implementation Grant Program. The County uses this program to provide funds or matching funds to leverage other wildfire mitigation grants. The County maintains an atlas of fuels reduction projects on its wildfire mitigation web page that is updated quarterly so that progress is documented on a regular basis. According to the CWPP, a total of 8,163 acres have been treated in the County since 2006.

Past Mitigation Efforts

Past mitigation efforts have focused on wildland-urban interface areas. The County has funded the following wildfire mitigation projects since 2006:

- Supplied \$50,000 as seed money to stimulate and encourage fuel reduction efforts on private lands valued at over \$200,000.
- Allocated \$20,000 toward a forester position in cooperation with the state and federal forest services.
- Actively managed four of its open space properties to mitigate the impacts of mountain pine beetle infestation and improve forest health. Properties managed include Blue Danube, Iron Springs, Mesa Cortina/Wilderness Buffer, and Mesa Cortina Trailhead.
- Cut and removed 2,130 trees from County lands.
- Sprayed 8,730 trees on County lands and on important public rights of way.

A.5 Goals and Objectives

Summit County adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 4 Mitigation Strategy.

A.6 Mitigation Actions

The planning team for the unincorporated areas of the County identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible agency, potential funding, estimated cost, and timeline also are included.

As part of its mitigation strategy, Summit County will continue participation in and compliance with the National Flood Insurance Program. Specific activities that the County will undertake to continue compliance include the following:

- Improving education and outreach efforts about flood insurance and floodplain management programs, and continue annual flooding meetings with key stakeholders (see Mitigation Action Summit County–13).
- Reviewing flood damage prevention ordinances and identifying opportunities to strengthen requirements and enforcement (see Mitigation Action Summit County–7).
- Working with FEMA and the Colorado Water Conservation Board in the review and adoption of new digital flood insurance rate maps (see Mitigation Action Multi-Jurisdictional-7).

Mitigation Action: Summit County—1 Vulnerable Populations

Jurisdiction:	Summit County
Action Title:	Coordinate vulnerable populations plans.
Priority:	High
Issue/Background:	Summit County needs to improve planning for vulnerable populations during natural disasters and other emergency events. This work also needs to be done to fulfill national mandates to identify and support vulnerable populations during emergency events. It will help to improve coordination and prevent duplication of efforts and confusion.
Ideas for Implementation:	The Summit County Office of Emergency Management will begin a process under Emergency Support Functions 6 and 8, Mass Care and Public Health, to identify the role and responsibility of County government departments with regards to support for vulnerable populations. The work will involve creating a collaborative of the multiple partners and stakeholders that each know and serve a portion of this population. This work needs to be a support annex to the Summit County Emergency Operations Plan. Initial work in this area would identify immediate contact information so that an emergency could be handled tomorrow if necessary. The work could be improved to include a local registry and GIS mapping.
Responsible Agency:	Summit County Office of Emergency Management
Partners:	All Summit County departments and other entities currently serving or servicing this population as well as state and regional organizations
Potential Funding:	Summit County and jurisdictions
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Protect public health and safety• Reduce community impacts of disaster and emergencies
Timeline:	Twelve months to implement after initial organization meeting - estimate September 2009.
Status:	Ongoing. The actions have resulted in the establishment of a Special Needs and Vulnerable Population Advisory Committee and now recently renamed the Functional and Access Needs Advisory Committee. The committee has active participation from partners who provide specialized services to clients. The Department of Social Services and Office of Emergency Management are active in the committee.

Mitigation Action: Summit County—2 Summit County Wildfire Council

Jurisdiction:	Summit County
Action Title:	Support and participate in the Summit County Wildfire Council.
Priority:	High
Issue/Background:	The Summit County Government has participated in the Summit County Wildfire Council from its inception. We have committed staff time and resources in the completion and updating of the plan and GIS products. We have supported the Council from the Board of County Commissioners by providing grant opportunities and project prioritization.
Ideas for Implementation:	The Council's responsibilities will need to extend for many years to come and will require part-time or full-time staff assignment. We may look for funding to support the hiring of a coordinator for this action item as it is critical to the continued success of this project. The Summit County Board of County Commissioners has allocated \$200,000 in the 2008 budget for fuel reduction projects and grants countywide and is anticipating funding these projects in 2009 in the amount of \$170,000.
Responsible Agency:	Summit County Manager's Office
Partners:	Summit County Government; Towns of Breckenridge, Dillon, Frisco, and Silverthorne; Lake Dillon and Red, White, and Blue Fire Protection Districts; Summit County Wildfire Council; U.S. Forest Service; and Colorado State Forest Service
Potential Funding:	Summit County
Cost Estimate:	\$45,000
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Improve communication and coordination• Protect public health and safety• Reduce wildfire risk through fuel reduction projects
Timeline:	Work within the next three months to determine if this project can be supported in the 2009 budget.
Status:	Ongoing. Summit County Government and the CSU Extension Office strongly support the work of the Wildfire Council. The Council acts as the advisory board to the Board of Commissioners on all matters related to wildfire. The Council administers an approximate \$350,000 budget for the local wildfire grant program, and public education. The Wildfire Council supports the concept of 'implementation' of the CWPP and funds not only defensible space projects, but hazard tree removal along right-of-way and bike paths, fire water storage systems, and comprehensive education programs. The CWPP lists a full table of implementation strategies for each focus area.

Mitigation Action: Summit County—3 Integration with Community Wildfire Protection Plan

Jurisdiction:	Summit County
Action Title:	Integrate wildfire mitigation strategies identified in the Summit County Community Wildfire Protection Plan (CWPP) into the multi-hazard mitigation plan.
Priority:	High
Issue/Background:	Summit County recognizes that the CWPP is a subset of the broader multi-hazard mitigation planning effort. The HMPC is comprised of many of the same stakeholders as the group who developed and updated the CWPP.
Ideas for Implementation:	The HMPC will work to maintain and further integrate the wildfire mitigation strategies between the two plans so they complement one another, lead to coordinated efforts, and help to better position the County for future wildfire grant funding.
Responsible Agency:	Summit County Office of Emergency Management
Partners:	Summit County Government; Towns of Breckenridge, Dillon, Frisco, and Silverthorne; Lake Dillon and Red, White, and Blue Fire Protection Districts; Summit County Wildfire Council; U.S. Forest Service; and Colorado State Forest Service
Potential Funding:	Summit County
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Improve communication and coordination• Reduce losses related to wildland-urban interface fires• Protect public health and safety
Timeline:	This is a continuous process through the life span of these planning efforts. The degree of successful integration will be visited by the HMPC in March 2009 prior to the work season for these projects in the summer of 2009.
Status:	Ongoing. A strong link exists between the two plans. During this plan period the Wildfire Council funded the matching portion of a Pre-Disaster Mitigation Grant to put a defensible space project on the ground in the Keystone area.

Mitigation Action: Summit County—4 Summit County Forest Health Group

Jurisdiction:	Summit County
Action Title:	Work with the Summit County Forest Health Group (formerly referred to as Mountain Pine Beetle Task Force) to strengthen public and stakeholder educational efforts.
Priority:	High
Issue/Background:	The Summit County Forest Health Group has grown from a grassroots effort of business, citizens, and government to create a forum to discuss and understand the mountain pine beetle infestation and its impacts on communities in Summit County. The forum has a substantial following and plays a vital role in public and political education of these important issues. Education on mitigation activities that individuals can undertake is critical in a community that has a high number of vacation and second homeowners. The importance of education on local programs, defensible space, and funding opportunities is necessary to sustain focused attention by the public and government on this issue and its future ramifications.
Ideas for Implementation:	Summit County will continue to participate in and coordinate with the efforts of the Forest Health Group with a focus on improving public education. The importance of public education is critical to successful mountain pine beetle program implementation. The momentum established behind public and political education has grown to result in state and federal legislative attention and funding.
Responsible Agency:	Summit Fire Protection Authority
Partners:	Summit County Government; Towns of Breckenridge, Dillon, Frisco, and Silverthorne; Lake Dillon and Red, White, and Blue Fire Protection Districts; Summit County Wildfire Council; U.S. Forest Service; and Colorado State Forest Service
Potential Funding:	Summit County
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Slow spread of mountain pine beetle infestation• Reduce losses related to wildland-urban interface fires• Provide public education about mitigation activities
Timeline:	This is an ongoing process that will be periodically visited by the HMPC. In March 2009, this action will be reviewed prior to the start of the summer construction season in 2009.
Status:	Ongoing. The partnership with the Forest Health Task Force continues to be strong and productive. Homeowner series of classes are supported by speakers from the Wildfire Council and others. These meetings create an additional avenue of access to groups of people interested in conversations about hazards and mitigation activities.

Mitigation Action: Summit County—5 Vulnerability in Wildland-Urban Interface

Jurisdiction:	Summit County
Action Title:	Continue to enhance mapping of hazard and vulnerability analysis for wildland-urban interface areas of Summit County.
Priority:	High
Issue/Background:	The Summit County Government GIS department has created digital mapping of the focus areas of highest concern for wildfire mitigation and fuel reduction efforts. Five categories were used to establish and identify the focus areas and these were established in our first Community Wildfire Protection Plan and are updated annually. This information is used to specifically identify areas which receive our highest priority of work on the ground. We are sensitive to the importance of identifying the areas of highest vulnerability, which may be due to developed land use, critical infrastructure, or natural resources of high value.
Ideas for Implementation:	Data and mapping related to the wildland-urban interface fire hazard and vulnerability will be continually enhanced with the annual reviews of the Community Wildfire Protection Plan and will be integrated into the multi-hazard mitigation plan, when appropriate, and at each five-year update.
Responsible Agency:	Summit County GIS Department
Partners:	Summit County Government; Towns of Breckenridge, Dillon, Frisco, and Silverthorne; and Lake Dillon and Red, White, and Blue Fire Protection Districts; Summit County Wildfire Council
Potential Funding:	GIS Department work time
Cost Estimate:	20-40 hours staff time
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Slow spread of mountain pine beetle infestation• Reduce losses related to wildland-urban interface fires• Provide public education about mitigation activities
Timeline:	This will be an ongoing effort that will be reviewed annually along with other Community Wildfire Protection Plan and hazard mitigation plan reviews by the HMPC.
Status:	Ongoing. This action results in the update of the CWPP mapping projects. Recently, a mapping project of defensible space work was completed and available to the public on our website. Additionally, the evacuation map book project was just updated in 2013.

Mitigation Action: Summit County—6 Wildfire Mitigation for Critical Facilities and Infrastructure

Jurisdiction:	Summit County
Action Title:	Identify and prioritize fuel reduction projects around critical facilities and infrastructure in wildfire hazard areas.
Priority:	High
Issue/Background:	Areas of high wildfire risk are located throughout the County. Damage to critical facilities and infrastructure during wildfire events can greatly increase community losses and economic impacts.
Ideas for Implementation:	Summit County will work to continue identification and prioritization of critical facilities and infrastructure located in wildfire hazard areas. This action will include mapping of these facilities and comparison with the previously identified wildfire vulnerability focus areas.
Responsible Agency:	Summit County Manager's Office, Office of Emergency Management, and GIS Department
Partners:	Summit County Government; Towns of Breckenridge, Dillon, Frisco, and Silverthorne; and Lake Dillon and Red, White, and Blue Fire Protection Districts; Summit County Wildfire Council
Potential Funding:	The Summit County Board of County Commissioners has allocated \$200,000 in the 2008 budget for fuel reduction projects and grants countywide and anticipates funding these projects in 2009 in the amount of \$170,000.
Cost Estimate:	Project costs are not yet known
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Prevent loss of lifeline utility services• Protect critical facilities and infrastructure• Reduce losses related to wildland-urban interface fires
Timeline:	This action is underway and will be evaluated by the HMPC and reviewed in March 2009 prior to the summer work season of 2009.
Status:	Completed. This work was completed and is in a maintenance condition.

Mitigation Action: Summit County—7 DFIRM Adoption

Jurisdiction:	Summit County
Action Title:	Review and strengthen floodplain regulations when adopting new digital flood insurance rate maps (DFIRMs).
Priority:	High
Issue/Background:	Summit County began the FEMA map modernization process in fall 2007 and preliminary DFIRMs are expected in fall 2008. The scheduled effective DFIRM date is fall 2009.
Ideas for Implementation:	Once the new DFIRMs are reviewed, approved, and effective, Summit County will work with FEMA on changes needed to make the Summit County floodplain regulations compatible and in compliance with NFIP requirements and will adopt new maps.
Responsible Agency:	Summit County Engineering Department
Partners:	Colorado Water Conservation Board, FEMA
Potential Funding:	Summit County
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Reduce risk of property damage due to flood
Timeline:	When new DFIRMs are adopted – estimated fall 2009
Status:	Completed. The Summit County DFIRMS were made effective in 2013 and were used to update the hazard mitigation plan risk assessment. The County has also revised its ordinance accordingly and to bring it into compliance with the State's updated Floodplain Rules.

Mitigation Action: Summit County—8 Incorporation into Master Plans

Jurisdiction:	Summit County
Action Title:	Incorporate information from the multi-hazard mitigation plan into community master plans.
Priority:	Medium
Issue/Background:	This action will help implement the plan's overall mitigation strategy and fulfill the requirement for incorporating the plan into existing planning mechanisms described in Chapter 5 Plan Implementation and Maintenance.
Ideas for Implementation:	<p>During the updates for each of the five master plans in Summit County, the mitigation plan will be reviewed and incorporated into appropriate sections. Each of the master plans is updated every three to five years. This may involve a review of the mitigation plan's risk assessment to incorporate appropriate data and analysis and a review of common goals and objectives between the plans.</p> <p>This action will be incorporated into staff work plans.</p>
Responsible Agency:	Summit County Planning Department
Partners:	Summit County Office of Emergency Management
Potential Funding:	Summit County
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Incorporation of mitigation plan into existing planning mechanisms• Improve coordination and communication
Timeline:	Dependent upon funding cycles
Status:	Ongoing. The Planning Department is continually updating the Development Code as needed. The Development Code naturally incorporates many of the Multi-Hazard Mitigation Plan principles.

Mitigation Action: Summit County—9 Roadside Ditch Erosion

Jurisdiction:	Summit County
Action Title:	Develop protection plan for roadside ditches to reduce erosion and flooding.
Priority:	Medium
Issue/Background:	Steep roadways, natural surface ditches (as opposed to storm sewer systems) and the extensive use of traction sand during winter storms lead to erosion and significant sediment deposition as a result of seasonal runoff and summer rainstorms.
Ideas for Implementation:	Where practical, divert roadside drainage to natural drainage ways to minimize flow in the roadside ditches and reduce the loss of road and shoulder materials. Also add the appropriate armouring and sediment collection areas to existing systems.
Responsible Agency:	Summit County Road and Bridge Department
Partners:	
Potential Funding:	Summit County
Cost Estimate:	Unknown but will be part of the annual maintenance budget
Benefits: (Losses Avoided)	<ul style="list-style-type: none">• Reduce damage due to erosion and flooding• Maintain safe roads
Timeline:	An ongoing maintenance issue
Status:	This has been implemented in select locations where the problem has either been accelerated by storm events or where reconstruction projects have provided an opportunity, and will continue to be implemented on future planned projects.

Mitigation Action: Summit County—10 Snake River Wastewater Treatment Plant Flood Protection

Jurisdiction:	Summit County
Action Title:	Enhance flood protection of the Snake River's collection system to prevent potential sanitary sewer overflows or inundation of critical facilities.
Priority:	Low
Issue/Background:	Manhole lids, specifically those with large lifting holes, in low lying areas are more prone to flooding and water inflow through these holes. This can cause sanitary sewer overflows and damage critical facilities.
Ideas for Implementation:	Replace these with manhole lids with no such openings or holes.
Responsible Agency:	Summit County, Snake River Wastewater Treatment Plant
Partners:	
Potential Funding:	Summit County
Cost Estimate:	\$1,000 total. Replacement cost for each manhole lid is approximately \$100 times 10 manhole lids.
Benefits: (Losses Avoided)	Reduce the potential for sanitary sewer overflows into the watershed and reduce the chance of impacting critical facilities and avoiding any type of emergency bypass.
Timeline:	Complete in 2008.
Status:	

Mitigation Action: Summit County—11 NFIP Public Information

Jurisdiction:	Summit County
Action Title:	Improve education and information on the National Flood Insurance Program (NFIP) and flood hazard areas in Summit County.
Priority:	Low
Issue/Background:	The Summit County website currently does not provide specific information on floodplain areas and special regulations in the County or the National Flood Insurance Program.
Ideas for Implementation:	Expand the Engineering Department website to include links to the new digital flood insurance rate maps (DFIRMs); local, state, and federal contacts; links to floodproofing methods; and minimum requirements for building in a floodplain. This project was updated in 2013 to include gaining an understanding of the implications of the Biggert-Waters Flood Insurance Reform Act of 2012. Work with FEMA and CWCB to understand the Reform Act and provide information to the public on how this might affect insurance rates, particularly those with second homes.
Responsible Agency:	Summit County Engineering
Partners:	Summit County Information Services and GIS departments
Potential Funding:	Summit County
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	Improve public awareness of flood risks and mitigation measures. Better public information reduces phone calls and improves the questions that need answers.
Timeline:	After the DFIRMs become available, but by 2011
Status:	Ongoing. In addition the awareness to seasonal high water and potential flooding is discussed annually at a meeting with key stakeholders. During 2010 this resulted in the update of the high water material and establishment of sand bag caches as well as local sand pile distribution sites in the at risk communities.

Mitigation Action: Summit County—12 CWPP Inclusion of Water and Utility Focused Layers

Jurisdiction:	Summit County
Action Title:	CWPP inclusion of water and utility focused layer
Priority:	High
Issue/Background:	The CWPP current data layer will be expanded to include a source water protection and utility infrastructure layer. This will assist with a more comprehensive understanding of the source water and utility infrastructure which could be impacted by wildfire.
Ideas for Implementation:	Incorporate into the current CWPP and Wildfire Council work. Review Blue River Watershed Assessment Report (2011) for applicable/related information
Responsible Agency:	Summit County Wildfire Council, Paul Cada
Partners:	Wildfire Council, OEM, GIS, USFS, CSFS
Potential Funding:	Local funds, Grants
Cost Estimate:	Staff time
Benefits: (Losses Avoided)	Create an understanding of potential impacts from wildfire in the water basins of Summit County and lead to advanced or immediate actions to lessen water quality issues.
Timeline:	2 years
Status:	New in 2013

Mitigation Action: Summit County—13 Prepare a Hazard Information and Action Guide

Jurisdiction:	Summit County
Action Title:	Prepare a Hazard Information and Action Guide
Priority:	Medium
Issue/Background:	The Summit County Hazard Mitigation Plans contains a wealth of valuable information on multiple hazards. This information could be condensed into a public information brochure to inform the public on risks and ways to mitigate them.
Ideas for Implementation:	This project would create a Summit County specific public information and action guide.
Responsible Agency:	Summit County Office of Emergency Management
Partners:	Summit County Wildfire Council, CSU Extension Office, Public Safety Agencies, and others.
Potential Funding:	Wildfire Council and grants
Cost Estimate:	\$35,000
Benefits: (Losses Avoided)	The education of the public creates awareness and empowers the public to take action to mitigate loss and risk.
Timeline:	2 years
Status:	New in 2013

Mitigation Action: Summit County—14 Conduct Public Education and Outreach Programs

Jurisdiction:	Summit County
Action Title:	Conduct Public Education and Outreach Programs
Priority:	High
Issue/Background:	An informed public can help reduce hazard impacts through personal preparedness and mitigation.
Ideas for Implementation:	Conduct public education and outreach programs. Facilitate independent topic presentations based upon hazard as well as partner with other outreach groups to reach already established audiences.
Responsible Agency:	Summit County Office of Emergency Management
Partners:	Summit County Wildfire Council, CSU Extension Office, Public Safety Agencies, Healthy Forest Task Force, Rotary Club of Summit County, and others.
Potential Funding:	Wildfire Council and grants
Cost Estimate:	\$20,000
Benefits: (Losses Avoided)	The education of the public creates awareness and empowers the public to take action to mitigate loss and risk.
Timeline:	Ongoing
Status:	New in 2013

Mitigation Action: Summit County—15 Receive Storm Ready status from the National Weather Service

Jurisdiction:	Summit County
Action Title:	Receive Storm Ready status from the National Weather Service
Priority:	High
Issue/Background:	The County is already doing some of the necessary elements to be designated 'Storm Ready' including warning and sheltering capabilities.
Ideas for Implementation:	Review Storm Ready requirements and work with the forecast office on the requirements.
Responsible Agency:	Summit County Office of Emergency Management
Partners:	Summit County Communications Center
Potential Funding:	Not required
Cost Estimate:	N/A
Benefits: (Losses Avoided)	The review and update of the plans and procedures necessary to receive this rating will be beneficial. CRS participating communities could also earn additional credits from this designation.
Timeline:	2 years
Status:	New in 2013

Mitigation Action: Summit County—16 Expand SCAAlert Public Warning Groups

Jurisdiction:	Summit County
Action Title:	Expand SCAAlert Public Warning Groups
Priority:	Medium
Issue/Background:	The SCAAlert system is one emergency notification system to the public. The system has been active for 4 years and the group structure for messages needs to be expanded.
Ideas for Implementation:	The new groups to be added need to include alternative language groups and public information groups separated from emergency message groups.
Responsible Agency:	Summit County Office of Emergency Management
Partners:	Summit County Communications Center, Summit County Public Information Officers Group; Buffalo Mountain Metro (See related action)
Potential Funding:	Not required
Cost Estimate:	N/A
Benefits: (Losses Avoided)	The relevance of the messaging system needs to be maintained in the public view. The system has over 11,000 subscribers. The updates to the system are based upon feedback on how to improve the usefulness.
Timeline:	1 year
Status:	New in 2013

Mitigation Action: Summit County—17 Compost for Revegetation

Jurisdiction:	Summit County
Action Title:	Compost for revegetation – created by fuels reduction projects to help mitigate flood damage and erosion/deposition/water quality impacts
Priority:	Medium (?)
Issue/Background:	Erosion is a significant problem associated with wildfires, construction, and steep slopes in general. The most effective method of preventing erosion is to establish strong vegetative cover, which can be enhanced by the use of compost that is generated at the landfill using, in part, beetle-killed trees.
Ideas for Implementation:	Continue generating compost for use in revegetation projects.
Responsible Agency:	Landfill
Partners:	Engineering/Planning/Road & Bridge/CDOT
Potential Funding:	n/a
Cost Estimate:	n/a
Benefits: (Losses Avoided)	Protects and enhances water quality
Timeline:	ongoing
Status:	New in 2013

Mitigation Action: Summit County—18 Property Protection and Home Construction

Jurisdiction:	Summit County
Action Title:	Wildfire, property protection, structural retrofits Non-Combustible roof replacement program
Priority:	High
Issue/Background:	Wood shake-shingle roofs are a significant contributor to the loss of residential homes in wildfires that emit ember showers. This project would work with homeowners in the WUI to retrofit their roofs.
Ideas for Implementation:	Create a project when grant funds are available to assist homeowners with retrofit of roofing materials to class A non-combustible shingles.
Responsible Agency:	Summit County
Partners:	Building Inspection Office, Fire Districts
Potential Funding:	PDM Grant and local match
Cost Estimate:	750,000.00 pilot project
Benefits: (Losses Avoided)	Property protection and wildfire damage mitigation
Timeline:	On-going
Status:	New in 2013

Mitigation Action: Summit County—19 All-Hazards Warning System

Jurisdiction:	Summit County
Action Title:	All Hazards, Emergency Services, Hazard Warning Systems
Priority:	Cellular Service Improvement in the Lower Blue Valley Medium
Issue/Background:	The improvement of cellular service in the Lower Blue would improve the ability to notify and have reported emergency situations in the area. The public warning of emergency situations and the public's ability to report situations to the 911 Center are benefits to this project.
Ideas for Implementation:	Work with elected leaders and citizen groups to educate Cellular providers about the service gaps in the Lower Blue Valley. Suggest elected leadership at State and Federal level bring this situation to the attention of the FCC.
Responsible Agency:	Summit County
Partners:	Fire Districts, Friends of the Lower Blue, other homeowners in the area
Potential Funding:	Awards, Grants
Cost Estimate:	Unknown
Benefits: (Losses Avoided)	Protection of life safety, improved emergency response
Timeline:	Ongoing
Status:	New in 2013