

RESOLUTION Number 12-008

RESOLUTION OF THE CITY OF KETCHUM CITY COUNCIL ADOPTING THE
BLAINE COUNTY MULTI-JURISDICTION ALL HAZARD MITIGATION PLAN

WHEREAS, in 2009, the City of Ketchum cooperated in and coordinated its efforts with Blaine County and other jurisdictions in the county to write and implement the *Blaine County Multi-Jurisdiction All Hazard Mitigation Plan* (hereinafter, "the Plan"), and

WHEREAS, in 2009, the Plan was adopted by the Blaine County Commissioners, and Notices of Acceptance and Participation in the Blaine County Multi-Jurisdiction All Hazard Mitigation Plan were signed by the mayors of the City of Ketchum, City of Sun Valley, City of Hailey, and City of Bellevue, along with the Friedman Memorial Airport and St. Luke's Wood River Medical Center, and

WHEREAS, the Plan is intended to help county and city officials plan, design, and implement programs and projects that will help reduce the jurisdictions' vulnerability to natural, technological, and man-made hazards and the Plan is used to facilitate inter-jurisdiction coordination and collaboration related to all hazard mitigation planning and implementation within the county and at the regional level, including emergency response planning, and

WHEREAS, the Plan addresses such natural hazards as severe weather, flooding, geologic, and other (wildfire and biological), and such technological or man-made hazards as structural fire, hazardous material event, riot/civil disorder, terrorism, and nuclear event, and

WHEREAS, the Plan allows the jurisdictions to meet certain federal program requirements and regulations, including but not limited to the Disaster Mitigation Act of 2000 and requirements of the Federal Emergency Management Agency (FEMA), and

WHEREAS, the City of Ketchum participates in FEMA's National Flood Insurance Program (NFIP) which provides for a flood insurance program serving residents whose properties may be impacted by flood and, whereas the City of Ketchum strives to improve its standing with the NFIP in order to minimize flooding and other hazard situations and also reduce flood insurance rates for its citizens through NFIP, and

WHEREAS, the adoption of the Blaine County Multi-Jurisdiction All Hazard Mitigation Plan will improve the City of Ketchum's standing in the NFIP, and

NOW THEREFORE, BE IT RESOLVED, that the Ketchum City Council adopts the 2009 Blaine County Multi-Jurisdiction All Hazard Mitigation Plan for implementation of the plan in hazard identification, planning, and operations.

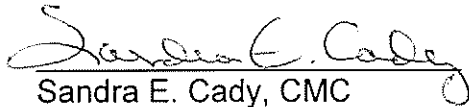
This resolution will be in full force and effect upon its adoption this second (2nd) day of April, 2012.

CITY OF KETCHUM, IDAHO



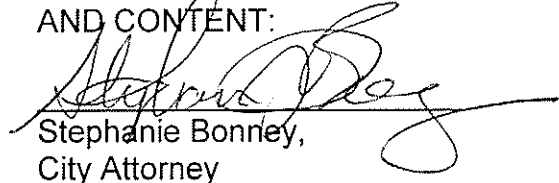
Randy Hall, Mayor

ATTEST:



Sandra E. Cady, CMC
City Treasurer/Clerk

APPROVED AS TO FORM
AND CONTENT:



Stephanie Bonney,
City Attorney

Section 1 Planning Process

Introduction

Blaine County Idaho and the incorporated Cities that lie within the County boundaries are vulnerable to natural, technological, and man-made hazards that have the possibility of causing serious threats to the health, welfare, and security of its residents. The cost of response to and recovery from the potential disasters, in terms of potential loss of life or property, can be lessened when attention is turned to mitigating their impacts and effects before they occur or re-occur.

This All Hazard Mitigation Plan seeks to identify the County's and Cities' hazards, understand their impact on vulnerable populations and infrastructure. With that understanding the Plan sets forth solutions that if implemented, have the potential to significantly reduce threat to life and property. The Plan is based on the premise that hazard mitigation works! With increased attention to managing natural hazards, communities can reduce the threats to citizens, and through proper land use and emergency planning, to avoid creating new problems in the future. Many solutions can be implemented at minimal cost and social impact.

This is not an emergency response or management plan. Certainly, the Plan can be used to identify weaknesses and refocus emergency response planning. Enhanced emergency response planning is an important mitigation strategy. However, the focus of this Plan is to support better decision making directed toward avoidance of future risk, and the implementation of activities or projects that will eliminate or reduce the risk for those that may already have exposure to a natural hazard threat.

Plan Organization

- Section 1 of the Plan provides a general overview of the process, the scope, purpose, and overall goals of the plan.
- Section 2 of the Plan gives a general background or description of the County's demographic, economic, cultural, and physiographic characteristics.
- Section 3 documents the public involvement component of the Plan.
- Section 4, the Risk Assessment section, provides a brief definition for each natural and man-made hazard. All hazards identified as affecting the County will be analyzed at the County and incorporated City level and then summarized in a hazard profile.
- Section 5 provides a review of the County Land Use Ordinances and Comprehensive Plan and provides suggestions for integration between the AHMP and the Land Use Planning efforts in the County.
- Section 6 presents Mitigation Goals and Objectives along with selected Mitigation Alternatives with supporting project descriptions and a "roadmap" to implementation for the highest priority projects.

Plan Use

The Plan should be used to help County and City officials plan, design, and implement programs and projects that will help reduce the jurisdictions vulnerability to natural, technological, and man-made hazards. The Plan should also be used to facilitate inter-jurisdiction coordination and collaboration related to all hazard mitigation planning and implementation within the County and at the Regional level. Lastly, the Plan should be used to develop or provide guidance for local emergency response planning. If adopted, this Plan will achieve compliance with the Disaster Mitigation Act of 2000.

Hazard Mitigation

Hazard mitigation is defined as any cost-effective action(s) that has the effect of reducing, limiting, or preventing vulnerability of people, culture, property, and the environment to potentially damaging, harmful, or costly hazards. Hazard mitigation measures which can be used to eliminate or minimize the risk to life, culture and property, fall into three categories:

- 1) Keep the hazard away from people, property, and structures.
- 2) Keep people, property, or structures away from the hazard.
- 3) Reduce the impact of the hazard on victims, i.e., insurance.

Hazard mitigation measures must be practical, cost effective, and culturally, environmentally, and politically acceptable. Actions taken to limit the vulnerability of society to hazards must not in themselves be more costly than the anticipated damages.

The primary focus of hazard mitigation planning must be at the point at which capital investment and land use decisions are made, based on vulnerability. Capital investments, whether for homes, roads, public utilities, pipelines, power plants, or public works, determine to a large extent the nature and degree of hazard vulnerability of a community. Once a capital facility is in place, very few opportunities will present themselves over the useful life of the facility to correct any errors in location or construction with respect to the hazard vulnerability. It is for this reason that zoning and other ordinances, which manage development in high vulnerability areas, and building codes, which insure that new buildings are built to withstand the damaging forces of the hazards, are often the most useful tools in mitigation that a jurisdiction can implement.

Since the priority to implement mitigation activities is usually very low in comparison to the perceived threat, some important mitigation measures take time to implement. Mitigation success can be achieved, however, if accurate information is portrayed through complete hazard identification and impact studies, followed by effective mitigation management.

The Federal Emergency Management Agency has identified specific natural hazards to be analyzed by each jurisdiction, completing an All Hazard Mitigation Plan. The hazards analyzed in this Plan include those required and others as selected by the County AHMP Committee. The hazards analyzed are as follows:

Natural Hazards

- Weather: Drought
Extreme Heat
Extreme Cold
Severe Winter Storm
Lightning
Hail
Tornado
Straight Line Wind
- Flooding: Flash Flood
River Flooding
Dam Failure
- Geologic: Earthquake
Landslide/Mudslide
Avalanche
- Other: Wildfire
Biological
 Pandemic/Epidemic
 Bird Flu
 SARs
 West Nile
 Hoof and Mouth Disease
 Mad Cow Disease

Technological (Manmade) Hazards

- Structural Fire
Nuclear Event
Hazardous Material Event
Riot/Demonstration/Civil Disorder
Terrorism

Purpose

The purposes of this plan are:

- Fulfill Federal and local mitigation planning responsibilities;
- Promote pre and post disaster mitigation measures with short/long range strategies that minimize suffering, loss of life, impact on traditional culture, and damage to property and the environment resulting from hazardous, or potentially hazardous, conditions to which citizens and institutions within the County are exposed;
- Eliminate or minimize conditions which would have an undesirable impact on our people, our culture, our economy, environment, and the well being of the County at large.
- Aid in enhancing elected officials, departments, and the public awareness to the threat that hazards have on the community's way of life and what can be done to prevent or reduce the vulnerability and risk.

Scope

This plan covers the areas within Blaine County Idaho including the participating incorporated cities of Bellevue, Carey, Hailey, Ketchum, and Sun Valley.

Mission Statement

The Blaine County All Hazard Mitigation Plan sets forth public policy designed to protect citizens, critical facilities, infrastructure, private and public property, the local economy, and the environment from risks associated with natural and manmade hazards.

Goals

AHMP Goals describe the broad direction that Blaine County and Incorporated City agencies, organizations, and citizens will take to select mitigating projects which are designed specifically to address risks posed by natural and manmade hazards. The goals, specific to each hazard category are stepping-stones between the mission statement and the specific objectives developed for the individual mitigation projects.

Severe Weather

- Blaine County will develop methods to mitigate the losses due to severe weather in the County.

Flooding

- Blaine County will continue to participate in the National Flood Insurance Program and develop actions that will reduce the damage to County infrastructure due to flash and stream flooding.

Geological

- Blaine County will reduce potential damage to County infrastructure and structures through implementation of earthquake mitigation techniques.
- Blaine County will reduce the potential damage to property from Landslides and Avalanches by adopting codes and standards for construction in landslide prone areas.

Wildfire

- Blaine County will reduce the losses caused by wildfire by continuing the Wildland Urban Interface Mitigation Program.

Biological

- Blaine County will seek to reduce the exposure of humans and animals to the West Nile Virus.
- Blaine County will identify risks to livestock from potential biological threats.

Structural Fire

- Blaine County will seek to reduce losses from Structure fires through working with private property owners.

Nuclear Event

- Blaine County will examine the risks posed to the County from Nuclear Facilities.

Hazardous Material Event

- Blaine County will seek to identify hazardous material flows through the County.

Riot/Demonstration/Civil Disorder

- Blaine County will develop methods to identify and report Civil Disobedience activities.

Terrorism

- Blaine County will identify measures to protect critical County infrastructure and facilities from potential terror incidents.

Aircraft Incidents

- Blaine County will continue to work with the Friedman Memorial Airport to study relocation sites.

Participating Jurisdictions

City of Bellevue

Severe Weather

- Reduce the impact of long periods of extended cold, due to power outages, or interruption of other heating fuels.
- Reduce impacts from winter storms.

Flooding

- The City of Bellevue will continue to participate in the National Flood Insurance Program.
- Reduce Impacts from flooding to the City of Bellevue and prevent loss or failure of the only irrigation source (District 45 Canal) to the south county.

Geological

- Reduce the potential damage to City infrastructure and buildings in the event of a large earthquake

Wildfire

- Reduce the losses of life and property caused by Wildfire.

Biological – *Pandemic Flu*

- Be prepared to adequately respond to citizen's long-term needs during an extended outbreak of disease.

Hazardous Materials

- Protect the City residents from hazardous material transportation incidents.

Terrorism

- Reduce the impact of terrorism on the City.

Other

- Develop a viable Continuity of Government Plan

City of Hailey

Severe Weather

Extreme Cold

- Reduce the impact of long periods of extended cold, due to power outages, or interruption of other heating fuels.

Winter Storms

- Reduce impacts from winter storms.

Flooding

- Reduce impacts from flooding city-wide, and prevent structures from being constructed in flood prone areas.
- Continue to participate in the NFIP

Geological

Earthquake

- Reduce potential damage to city infrastructure and structures.

Avalanche/Landslides

- Reduce the potential of deaths or injury by prohibiting construction of structures on "Red Zone" areas and limiting development in "Blue Zone" avalanche areas.
- Increased awareness of avalanche/landslide areas through informational programs and signage is recommended.

Wildfire

- Reduce the losses caused by wildfires, and their impact on persons affected by them.

Biological

Pandemic Flu

- Be prepared to adequately respond to citizen's long-term needs during an extended outbreak of disease or famine.

Terrorism

- reduce the impact of terrorism or vandalism

Other

Continuity of Government Planning

- Develop a viable Continuity of Government Plan

City Sun Valley

Severe Weather

Power Outages

- To provide for a secondary power line from the substation to the south, to assure we can provide for our guests and residents alike in the event of a long term power outage

Winter Storm

- Reduce impacts from large winter storms.

Extreme Cold

- Reduce the impact of long periods of extended cold, due to power outages, or interruption of any other heating sources.

Flooding

- Reduce impact from flooding in the city of Sun Valley and prevent a collapse of the Sun Valley Lake Dam.
- Continue to participate in the NFIP.

Geological

Earthquake

- Reduce the potential damage to city infrastructure and buildings in the event of a large earthquake.

Wildfire

- Reduce losses of life and property caused by wildfires.

Biological

Pandemic Flu

- Assure we are prepared to respond to citizen's long-term needs during an extended outbreak of disease.

Hazardous Materials

- Be able to deal with and contain a leak or spill from the Ice Rink Anhydrous Ammonia plant, and to warn all occupants of the resort and the cities of Ketchum and Sun Valley.

Terrorism

- Reduce impact of acts of terrorism at the Resort and our City in general.

Other

Continuity of Government

- Develop a viable Continuity of Government Plan

City of Carey

Flood

- The City of Carey will continue to participate in the National Flood Insurance Program and develop actions that will reduce the damage to City property and infrastructure due to flooding.
- The City of Carey will protect citizens from losses due to flash flooding

Geological

- The City of Carey will reduce potential damage to City infrastructure and structures through implementation of earthquake mitigation techniques.

City of Ketchum

Flood

- The City of Ketchum will continue to participate in the National Flood Insurance Program and develop actions that will reduce the damage to City property and infrastructure due to flooding.

Geological

- The City of Ketchum will reduce potential damage to City infrastructure and structures through implementation of earthquake mitigation techniques.

Structure Fire

- The City of Ketchum will seek to reduce losses from Structure fires.

Blaine All Hazard Mitigation Planning Committee

The Blaine All Hazard Mitigation Planning Committee was formed on October 9, 2008. Committee membership is comprised of representatives from the Blaine County Local Emergency Planning Committee, Blaine County Department heads, representatives from the Transportation Districts and the incorporated cities, representatives from the major utility providers, interested media, and members of the public. Minutes of the committee meetings are provided in Attachment 1.

The Committee Roster is provided below:

All Hazard Planning Committee Members

Agency	Representative	Position	E-mail
Bureau of Homeland Security	Gary Davis	Central Area Field Officer	gdavis@bhs.idaho.gov
Ketchum Fire	Mike Elle	Fire Chief	melle@ketchumfire.org
Wood River Fire	Bart Lassman	Fire Chief	blassman@wrfr.com
Sun Valley Police	Cam Daggett	Chief	cdaggett@svidaho.org
Blaine County Sheriff's Office	Gene Ramsey	Chief Deputy	gramsev@co.blaine.id.us
Blaine County Road & Bridge	Craig Vaughn	Supervisor	cvaughn@co.blaine.id.us
Blaine County Administration	Derek Voss	Administrator	dvoss@co.blaine.id.us
Blaine County Planning and Zoning	Tom Bergin	Building Official	tbergin@blaine.id.us
Blaine County Commissioners	Tom Bowman	Commissioner	tbowman@co.blaine.id.us
City of Hailey	Tom Hellen	Public Works Director	tom.hellen@haileycityhall.org
City of Ketchum	Brian Christiansen	Public Works Director	bchristiansen@ketchumidaho.org
Ketchum Police Department	Steve Harkins	Chief	sharkins@ketchumpolice.org
Blaine County School District	Rex Squires	Transportation Supervisor	rsquires@blaineschools.org
Blaine County Communications	Beth English	Supervisor	benglish@co.blaine.id.us
Friedman Memorial Airport	Pete Kramer	Representative	pk@flvfma.com
Blaine County Flood District	Bob Simpson	Representative	watermaster37@aol.com
Blaine County Flood District	Bruce Tidwell	Representative	bmts@woodriverlandtrust.org
Wood River Land Trust	Kathryn Goldman	Representative	kgoldman@woodriverlandtrust.org
Saint Luke's Wood River Medical Center	JoDee Alverson	Administrator	alverso@slwrmc.org
Sun Valley Fire Department	Jeff Carnes	Fire Chief	jcarnes@svidaho.us

Hailey Fire Department	Mike Chapman	Fire Chief	mchapman2@cox-internet.com
Sun Valley Company	Cory Lovoi	K E Rink Manager	clovoi@sunvalley.com
Blaine County	Char Nelson	Operations	cnelson@co.blaine.id.us
Sun Valley Fire Department	Ray Franco	Assistant Chief	rfranco@svidaho.org
	Cindy Jesinger		cindvjesinger@gmail.com
South Central Public Health District	Karyn Goodale	Manager	kgoodahl@phd5.idaho.gov
Blaine County Disaster Services	Chuck Turner	Coordinator	twodogs2@mindspring.com
City of Sun Valley	Sharon Hammer	Administrator	shammer@SVIdaho.org
City of Ketchum	Sid Rivers	Planning and Zoning Planner	srivers@ketchumidaho.org
City of Hailey	Tom Hellen	Public Works Director	tom.hellen@haileycitybuilding
City of Bellevue	Craig Eckles	Planning Director FEMA Administration	ceckles@bellevue.idaho.us
Keller Associates	Susan Burnham	Civil Engineer	sburnham@kellerassociates.com
Idaho Power	Jim Bell	District Manager	jimbell@idahopower.com
Sawtooth North Fire	Bill Murphy	North Zone FMO	bgmurphv@fs.fed.us
Blaine County School Department #61	Howard Royal	Facilities Director	hroval@blaineschools.org
Blaine County	Angenie McCleary	Commissioner	amcclearv@co.blaine.id.us
Blaine County School	Katie Palmer	Human Resources	katie@blaineschools.org
Blaine County School	Mal Prior	Building Mgr	mprior@blaineshools.org
Sun Valley Streets	Bill Whitesell	Street Superintendent	bwhitesell@svidaho.org
Sun Valley Water & Sewer	Pat McMahon	Manager	pat@svwsd.com
Hailey City Council	Carol Brown	Council Member	carol.brown@haileycityhall.org
Blaine County	Bill Dyer	Building Official	bdver@co.blaine.id.us
City of Sun Valley	Eric Adams	Building Official	eadams@svidaho.org
Ketchum Fire	Robbie Englehart	Assistant Chief	renglehart@ketchumfire.org
Blaine County Firewise	Karly Maratea	Assistant	karlymarateais@gmail.com
Blaine County Firewise	Angie Grant- Kettleband	Coordinator	angelahgrant@hotmail.com
Hailey Police	Dave Stellers	Assistant Chief	dave.stellers@haileycityhall.org
Hailey Fire	Mike Baledge	Captain	mike.baledge@haileycityhall.org
Wood River Fire	Jeff Nevins	Assistant Chief	jnevins@wrfr.com

Sun Valley Fire Department	Ray Franco	Assistant Chief	rfranco@svidaho.org
City of Sun Valley	Wayne Willich	Mayor	wwillich@svidaho.org
City of Sun Valley	Nils Ribi	Council President	nils@nilsribi.com
LEPC	Kim Rogers	Public Information Officer	kimmrogers@cox.net
Sun Valley Police Department	Kim Orchard	Sergeant	korchard@svidaho.org
Bellvue Fire	Greg Beaver	Fire Chief	gbeaver@bellvue.id.us
LWID/Carey City Offices	Bob Simpson	Manager	watermaster37n@aol.com

Planning Process

One of the key, necessary steps of this Planning Process was the organization of a Blaine County Hazard Mitigation Committee. The Committee was established under the direction of the Blaine County Coordinator of Disaster Services. Figure 1.1 illustrates the Fifteen Step Planning Process that was used in the development of the Blaine AHMP.

County All Hazard Mitigation Planning Process

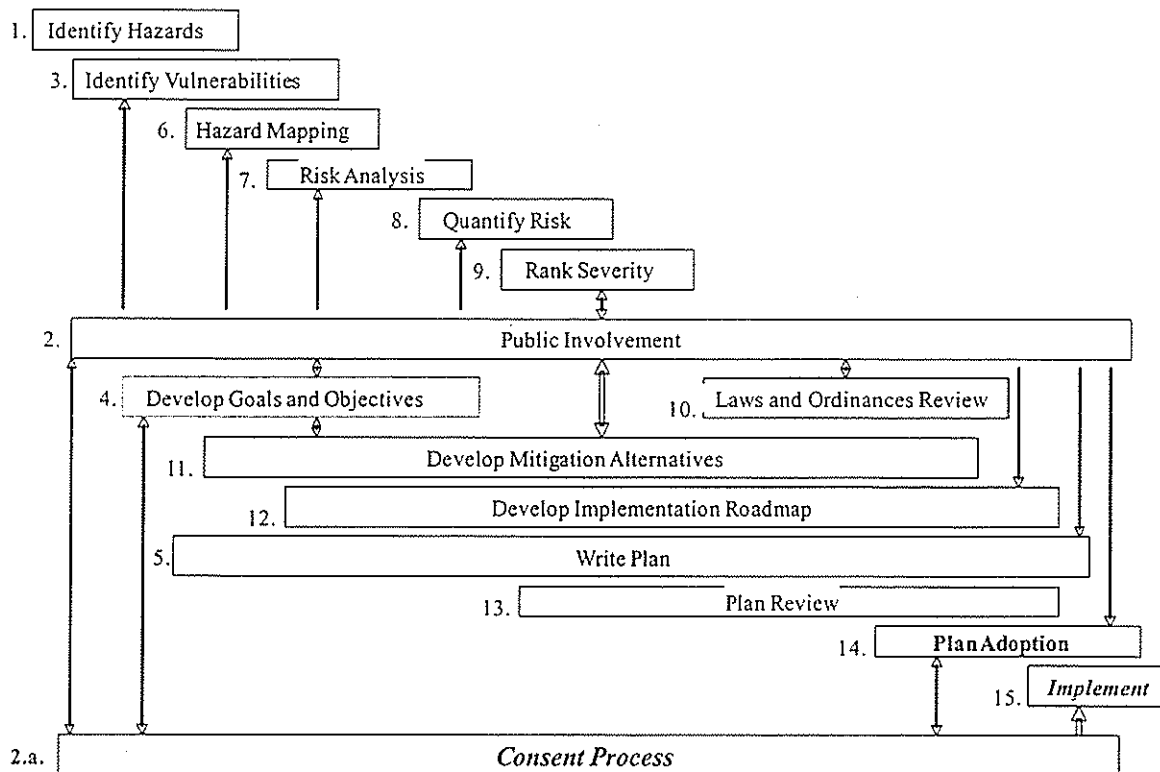


Figure 1.1 AHMP Planning Process

Step 1 Identify Hazards

Blaine County hazards were identified and their frequency of occurrence evaluated using a number of resources including:

- Hazard planning documents developed by State, Federal and private agencies,
- National Weather Service weather data from the past 50 years, and
- Data from the United States Geological Survey (USGS) and the Idaho State Geological Survey (ISGS).

To determine frequency of occurrence the historical analysis of hazardous event was conducted. One of the difficult tasks facing hazard mitigation professionals is the determination of the potential frequency of a natural hazard occurrence. Comparing historical facts against technically determined probability allows one to establish confidence, or not, in published

scientific predictions. The process whereby the frequency is determined and then expressed in an expected reoccurrence interval, (see Figure 1.2 below for an illustration) is based on research conducted at the University of South Carolina.

Location	No. of Years	No. of Events	Reoccurrence Interval
County	23	17	1.35

Figure 1.2 Example of Reoccurrence Interval

The estimated occurrence of the hazard is a useful element in the hazards assessment so one can distinguish between infrequent hazards like hurricanes from frequent hazards such as flooding. This calculation provides a useful indicator of the relative importance of each of the hazards that affect the jurisdictions, individually or collectively. The frequency of occurrence is a straightforward calculation from the historical data and the length of that record in years. The number of hazard occurrences is divided by the number of years in the record. This yields the probability of the event occurring in any given year. For instance, if a hypothetical hazard "A" occurred 17 times in the county over the past 23 years, the probability of occurrence for that hazard would be in a given year would be $17 / 23 = .739$, or 73.9%. The reverse of this equation results in a reoccurrence interval in years. For example, the reoccurrence interval of this hazard is calculated as $23 / 17 = 1.35$. Hazard "A" can be expected to occur every 1.35 years. These frequencies are then correlated with magnitude to define the risk of a given hazard.

In addition, part of the Public Involvement process described in Step 2 provides valuable specific information regarding how hazards affect local communities. For example, local residents are very willing to provide information regarding annual flooding hazards that are not available in larger scope formalized assessments such as FEMA produced Flood Insurance Rating Maps (FIRM). Therefore public questionnaire and public meetings are often very critical to identifying small repetitive losses from natural hazards.

A community survey was mailed to 300 residents of Blaine County. A copy of the Survey and results is located in Attachment 2 and summarized in Section 3. In addition, the members of the AHMP Committee were requested as private citizens to provide, through a short worksheet instrument, their opinions regarding risks posed to the County. This was done at the first AHMP Committee meeting.

A local mitigation workshop was held. Those that were invited included all members of the AHMP Committee as well as members of City Councils and other appropriate City Agency Heads. The meeting was also held as an open public meeting and announced in the local news media.

Step 3 Identify Vulnerabilities

The Committee examined the effects of the raw hazard list on the County by identifying vulnerable populations, infrastructure, critical services, facilities, and environment. Vulnerabilities will be geographically identified using Geographical Information System (GIS) technology and then linked to a GIS data base, describing the vulnerable target including potential damage and estimates of losses.

Step 4 Develop Goals and Objectives

FEMA requires that the planning effort be centered on community supported hazard reduction goals, and that those goals be implemented and evaluated based on measurable objectives. Mitigation projects are then assessed against the established goals and objectives to insure that the selected projects reduce risk as desired

Step 5 Write Plan

The Plan outline meets and in some instances exceeds the requirements set forth by FEMA in the FEMA PDM Criteria Crosswalk. Plan drafts were presented in hard and electronic copy as requested by the Committee. The finished Plan includes information on Plan adoption, including a promulgation page for the County and an agreement to endorse and participate for each incorporated City.

Step 6 Hazard Mapping

As described in Steps 1 and 4, hazard maps were extremely important in illustrating hazard and vulnerability locations. In addition, information used to conduct the risk assessment and the loss estimates was linked electronically to the maps using GIS technology. The electronic versions of these maps were provided to the Committee and other reviewing agencies.

Step 7 Hazard Analyses

A risk analysis was conducted using the information gathered in Steps 1-4 and 6. For each hazard, two kinds of information are required in order to assess risk; information concerning the potential amount of damage a hazard event can cause (hazard magnitude), and that pertaining to how frequently such events are likely to occur (hazard frequency). To the extent that such data can be obtained quantitatively, risk may then be determined as the product of the hazard's magnitude and its frequency. In practice, precise quantitative data of both kinds is often difficult or impossible to obtain.

Frequency of occurrence for a given hazard may be estimated using historical records. The value of frequency estimates obtained in this way is subject to the existence of such records, their availability, and their accuracy. Even with good historical records, however, projections of future

Table 1.1 Frequency Level Criteria

frequency may not be valid because of changing conditions. Long- and short-term climate cycles (among other factors) affect weather events, economic conditions and technical advances affect man-made hazards, land use and the passage of time affect geological hazards, etc. For this reason, scientific projections, when available, are also used to modify, enhance or

Frequency of Hazard	
Ranking	Description
HIGH	Multiple Times a Year to 5 Years
MEDIUM	5 to 25 Years
LOW	25 Years to Hasn't Happened

replace those made from historical data. For any given location, however, historical records are often scarce and/or unreliable, and scientific projection methods either do not exist or

require data that has not been, or cannot be gathered. Thus, a third source of frequency data is utilized in this Plan; the subjective judgments of the location's inhabitants. While semi-quantitative at best, and subject to biases, data of this sort may well be as reliable as any other. It reflects, in any event, the perceived needs of those for whom the planning is being done. Frequency projection data from all three sources was used, as appropriate in this plan.

Because all are subject to considerable uncertainty, the composite data was examined and assigned a relative level based on the criteria shown in Table 1.1.

Repetitive Loss designations are used to eliminate or reduce the damage to property and the disruption of life caused by repeated damage of the same properties. The criteria to determine repetitive loss includes the following:

- Four or more losses of more than \$1,000 each in a 5 year period; or
- Two losses within a 10-year period that, in the aggregate, equal or exceed the current value of the insured property; or
- Three or more paid losses that, in the aggregate, equal or exceed the current value of the insured property.

Hazard magnitude estimates, too, must rely on data gathered from a number of sources, none of which may be precise. Historical data, scientific projections, and inhabitants' subjective judgments are, again, used for this purpose. Magnitude estimates are generally based on the severity of potential impact on three critical vulnerabilities: human life, property, and the environment. FEMA has, however, recognized that there are other issues tied to community support of risk mitigation including social, cultural, and economical issues. Composite data from all sources including the vulnerabilities identified in Section 4.6 have been utilized to assign a quantitative magnitude for each hazard for the County and for each local jurisdiction, based on the criteria shown in Table 1.2.

Magnitude of Hazard						
Value	Reconstruction Assistance From	Geography (Area) Affected	Expected Bodily Harm	Loss Estimate Range	Population Sheltering Required	Warning Lead Times
1	Family	Parcel	Little to No Injury / No Death	\$1000s	No Sheltering	Months
2	City	Block or Group of Parcels	Multiple Injuries with Little to No Medical Care / No Death	\$10,000s	Little Sheltering	Weeks
2	County	Section or Numerous Parcels	Major Medical Care Required / Minimal Death	\$100,000s	Sheltering Requiring Neighboring Counties Help	Days
4	State	Multiple Sections	Major Injuries / Requires Help from Outside County / A Few Deaths	\$1,000,000s	Long Term Sheltering Effort	Hours
8	Federal	County Wide	Massive Casualties / Catastrophic	\$10,000,000s	Relocation Required	Minutes

Table 1.2 Hazard Magnitude Criteria

A hazard's total magnitude is the sum of the values for each of the six categories. Thus, a hazard event that is expected to require Reconstruction Assistance from the State government (Value = 4), affect an area consisting of Multiple Sections (Value = 4), cause Little to No Injury and No Deaths (Value = 1), Require Little Sheltering (Shelter = 2) or cause Some Economic Loss (Value = 2), and have a Warning Lead Time of Hours (Value = 4), would be assigned a magnitude value of 17 (4+4+1+2+2+4=17).

Risk assessment methods included the use of FEMA's HAZUS Risk Assessment software. Risk assessment activities also included the mapping of hazard occurrences, at-risk structures including critical facilities, and repetitive flood loss structures, land use, and populations.

Step 8 Quantify Risk

Once a hazard's magnitude and its frequency have been evaluated, a picture of the over-all risk severity associated with that hazard emerges. Because the values are necessarily imprecise and subjective, the risk is visualized by plotting them as shown in Figure 1.2. Here, the frequency is plotted on the vertical axis (Low at the top to High at the bottom), and magnitude is on the horizontal axis (Low = 6 to 12, Medium = 13 to 20, and High = 21 to 48). Hazards with the most severe associated risk, therefore, appear toward the lower right while lowest severity risk hazards appear near the upper left.

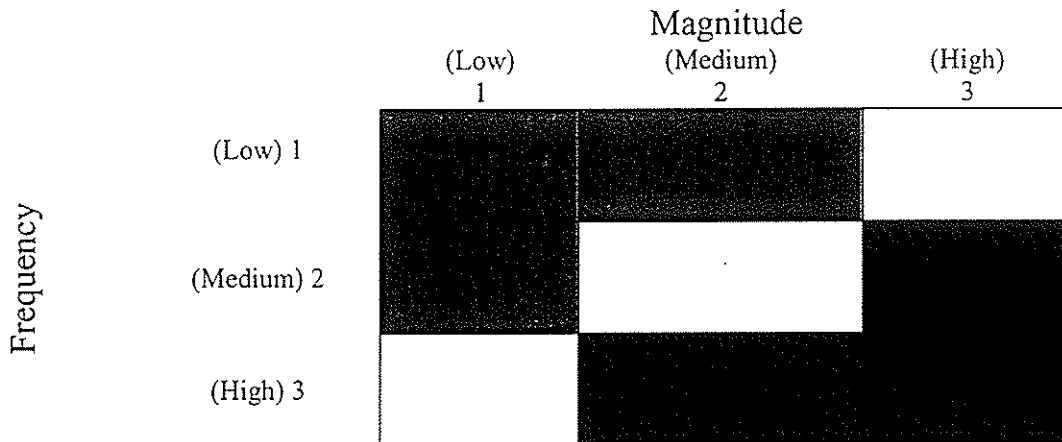


Figure 1.3 Risk Ranking Plot

Step 9 Rank Severity

To assist in prioritizing mitigation activities, the severities of all hazards considered in the Plan are ranked relative to one another using the above plotting scheme. Prioritization is also based on goals and objectives developed and approved by the Blaine County Board of County Commissioners.

Step 10 Laws and Ordinances Review

The Blaine Comprehensive Plan and land use ordinances were reviewed against the list of ranked hazards to determine if there were any restrictions or enabling powers that affect possible hazard mitigation alternatives. A report of this action is provided in Section 5, Land Use Planning.

Step 11 Develop Mitigation Alternatives

Potential projects to address identified risk were developed and listed in Section 6. The project descriptions and associated roadmap address approximate costs, possible returns on investments, environmental, and socio-economic benefits. Engineering cost estimates based on the conceptual design will be included if provided by the County.

Step 12 Develop Implementation Roadmap

Roadmapping is essentially the development of a high level project schedule. The Mitigation Roadmap in Section 6 of the Plan provides the necessary steps to be taken and the order in which they should occur to insure project implementation. The Implementation Roadmap addresses the four highest priority mitigation projects identified during the planning effort and includes possible funding options. Other possible mitigation projects were identified in list form linking them to the Plan Goals and Objectives, desired outcome, and assigned agency or department.

Step 13 Plan Review

Plan review occurred at two distinctly different times. The initial plan review was conducted by the Coordinator during development. Once the Plan is completed, it will be submitted along with the completed FEMA PDM Criteria Cross Walk to the Idaho Bureau of Homeland

Security's Hazard Mitigation Officer, and then to FEMA Region 10's Hazard Mitigation Officer for review. The Blaine County Board of County Commissioners also reviewed the Plan in a parallel time frame.

Step 14 Plan Adoption

The Coordinator will make a formal public presentation to the Blaine County Board of County Commissioners seeking their approval of the Plan. A letter of Promulgation is provided in the Plan. In addition, each participating jurisdiction will be requested to adopt the Plan by resolution with the respective mayors signing the appropriate multi-jurisdiction participation document.

Step 15 Implement

By using this process, the Blaine County AHMP Committee has developed a fully implementable Multi-Jurisdiction All Hazard Mitigation Plan to be presented for approval to the County Board of Commissioners and to the Mayors of the incorporated cities of the County. Upon approval of the Plan, the implementation process can and should begin.

Plan Maintenance

The Blaine County AHMP maintenance process includes monitoring and evaluating the programmatic outcomes established in the Plan annually and producing a Plan revision every five years.

Formal Review Process

The Plan will be evaluated on an annual basis to determine the effectiveness of programs and to reflect changes that may affect mitigation priorities. The evaluation process includes an annual meeting with identified local agencies and organizations. The Coordinator of Disaster Services or designee will be responsible for contacting the Mitigation Committee members and organizing the annual review. Committee members will be responsible for monitoring and evaluating the progress of the mitigation strategies in the Plan.

The Committee will review the goals and action items to determine their relevance to changing situations in the County, as well as changes in State and Federal policy, and to ensure they are addressing current and expected conditions. The Committee will also review the risk assessment portion of the Plan to determine if this information should be updated or modified, given any new available data. The coordinating organizations responsible for the various action items will report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised or removed.

The Coordinator will be responsible to ensure that updates to the Plan are published within three months of the Committee's review. The Coordinator will also notify all holders of the County AHMP and affected stakeholders when changes have been made. Every five years the updated plan will be submitted to the State of Idaho Bureau of Homeland Security's Mitigation Program and the Federal Emergency Management Agency for review.

Continued Public Involvement

Blaine County Disaster Services is dedicated to involving the public directly in the review and update of the Plan. The Coordinator is responsible for the annual review and update of the Plan. The public will also have the opportunity to provide input into Plan revisions and updates. Copies of the Plan will be catalogued and kept at all of the appropriate County departments and

outside agencies. The existence and location of these copies will be publicized in the local newspaper following each annual review and update.

A public meeting will be held after each annual evaluation or when deemed necessary by the Coordinator. The meetings will provide the public a forum where they can express concerns, opinions, or new alternatives that can then be included in the Plan. The Board of County Commissioners will be responsible for using County resources to publicize the annual public meetings and maintain public involvement.