

Mountainland Pre-Disaster Hazard Mitigation Plan 2017



Avalanche near Park City (Mark White); Fox Bay Fire (Wasatch County); Flood/Debris Flow event (Utah County); Thistle Creek Landslide (Utah County)

Prepared By



MOUNTAINLAND

ASSOCIATION OF GOVERNMENTS

Serving Summit, Utah and Wasatch Cities & Counties

Executive Summary

Purpose

To fulfill federal, state, and local hazard mitigation planning responsibilities; to promote pre- and post-disaster mitigation measures, short/long range strategies that minimize suffering, loss of life, and damage to property resulting from hazardous or potentially hazardous conditions to which citizens and institutions within the state are exposed; and to eliminate or minimize conditions which would have an undesirable impact on our citizens, the economy, environment, and the well-being of the state of Utah. This plan is an aid in enhancing city and state officials, agencies, and public awareness to the threat that hazards have on property and life and what can be done to help prevent or reduce the vulnerability and risk of each Utah jurisdiction.

Scope

Utah PDM Planning phase is statewide. The State of Utah will work with all local jurisdictions by means of the seven regional Association of Governments. The Mountainland Association of Governments area, which covers the counties of Summit, Utah and Wasatch, will have a plan completed by April 01, 2017 to give to the Utah Division of Emergency Management. Future monitoring, evaluating, updating and implementing will take place as new incidents occur and or every three to five years and will be included in the local mitigation plans as well. Natural hazards addressed are: Flooding; Wildland Fire; Landslide; Earthquake; Drought; Severe Weather; and Infestation.

The counties, cities and towns of the Mountainland three-county area are:

Summit County

Coalville, Francis, Henefer, Kamas, Oakley, and Park City.

Utah County

Alpine, American Fork, Cedar Fort, Cedar Hills, Eagle Mountain, Elk Ridge, Fairfield, Genola, Goshen, Highland, Lehi, Lindon, Mapleton, Orem, Payson, Pleasant Grove, Provo, Salem, Santaquin, Saratoga Springs, Spanish Fork, Springville, Vineyard, and Woodland Hills.

Wasatch County

Charleston, Daniel, Heber, Hideout, Independence, Interlaken, Midway, and Wallsburg.

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Part I

Introduction

Introduction

The State of Utah is vulnerable to natural, technological, and man-made hazards that have the possibility of causing serious threat to the health, welfare, and security of our citizens. The cost of response to and recovery from potential disasters can be lessened when attention is turned to mitigating their impacts and effects before they occur or re-occur.

What is Hazard Mitigation

Hazard mitigation is defined as any cost-effective action(s) that have the effect of reducing, limiting, or preventing vulnerability of people, 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 and property, fall into three categories. First; those that keep the hazard away from people, property, and structures. Second; those that keep people, property, and structures away from the hazard. Third; those that do not address the hazard at all but rather reduce the impact of the hazard on the victims such as insurance or grants. This mitigation plan has strategies that fall into all three categories.

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

The primary focus of hazard mitigation actions must be at the point at which capital investment decisions are made and based on vulnerability. Capital investments, whether for homes, roads public utilities, pipelines, power plants, chemical plants or warehouses, 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 hazard vulnerability. It is for these reasons that zoning ordinances, which restrict development in high vulnerability areas, and building codes, which insure that new buildings are built to withstand the damaging forces of hazards, are the most useful mitigation approaches a city can implement.

Previously, mitigation measures have been the most neglected programs within emergency management. Since the priority to implement mitigation activities is generally 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. Hazard mitigation is the key to eliminating long-term risk to people and property living in Utah from hazards and their effects. Preparedness for all hazards includes response and recovery plans, training, development, management of resources, and the need to mitigate each jurisdictional hazard.

The State Division of Emergency Management has identified the following hazards to be analyzed by each county. These hazards include avalanche, dam failure, debris flow, drought, earthquake, flood, flash flooding, infestation, landslide, problem soils, summer storm, tornado, urban and rural fires, and winter storm.

This regional/multi-jurisdictional plan evaluates the impacts, risks and vulnerabilities of natural hazards in a jurisdictional area affected by a disaster. The plan supports, provides assistance, identifies and describes mitigation projects for each annex. The suggestive actions and plan implementation for local and tribal governments could reduce the impact of future disasters. Only through the coordinated partnership with emergency managers, political entities, public works officials, community planners and other dedicated individuals working to implement this program was it accomplished.

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Wasatch County

Charleston, Daniel, Heber, Hideout, Independence, Interlaken, Midway, and Wallsburg.

Authority

Federal: Public Law 93-288 as amended, established the basis for federal hazard mitigation activity in 1974. A section of this Act requires the identification, evaluation, and mitigation of hazards as a prerequisite for state receipt of future disaster assistance outlays. Since 1974, many additional programs, regulations, and laws have expanded on the original legislation to establish hazard mitigation as a priority at all levels of government. When PL 93-288 was amended by the Stafford Act, several additional provisions were also added that provide for the availability of significant mitigation measures in the aftermath of Presidential declared disasters. Civil Preparedness Guide 1-3, Chapter 6- Hazard Mitigation Assistance Programs places emphasis on hazard mitigation planning directed toward hazards with a high impact and threat potential.

President Clinton signed the Disaster Mitigation Act of 2000 into Law on October 30, 2000. Section 322, defines mitigation planning requirements for state, local, and tribal governments. Under Section 322 States are eligible for an increase in the Federal share of hazard mitigation (HMGP), if they submit for approval a mitigation plan, which is a summary of local and/or regional mitigation plans, that identifies natural hazards, risks, vulnerabilities, and describes actions to mitigate the hazards risks and vulnerabilities in that plan.

State: The Governor's Emergency Operation Directive, The Robert T. Stafford Disaster Relief and Emergency Assistance Act, amendments to Public Law 93-288, as amended, Title 44, CFR, Federal Emergency Management Agency Regulations, as amended, State Emergency Management Act of 1981, Utah Code 53-2, 63-5, Disaster Response Recovery Act, 63-5A, Executive Order of the Governor, Executive Order 11, Emergency Interim Succession Act, 63-5B.

Local: Local governments play an essential role in implementing effective mitigation, both before and after disaster events. Each local government will review all damages, losses and related impacts to determine the need or requirement for mitigation action and planning whenever seriously affected by a disaster, or when applying for state or federal recovery assistance. In the counties and cities making up the MAG Region, the local executive responsible for carrying out plans and policies are the County Commissioners/Council Members and City Mayors. Local Governments must be prepared to participate in the post disaster Hazard Mitigation Team process and the pre-mitigation planning as outlined in this document.

Association of Governments: The Association of Governments have been duly constituted under the authority of Title XI, Chapter 13, Utah Code Annotated, 1953, as amended (The Inter-local Cooperation Act) and pursuant to Section 3 of the Executive Order of the Governor of the State of Utah, dated May 27, 1970, with the authority to conduct planning studies and to provide services to its constituent jurisdictions.

Introduction to Region

Geography

The area’s geography is quite varied with desert to the far west and high mountains in the east. The bulk of the population is found in the fertile valleys lying between mountains. Agricultural land supports mainly fruit orchards, some cattle and sheep ranches, grain farms, dairies, hogs, chickens and smaller individual farms. Pine clad slopes and oak brush foothills characterize much of the undeveloped mountain landscape that exists in the area. Development encroachment of hillsides is of real concern to environmentalists, planners, wildlife managers and fire marshals. Only a small percentage of the area’s unincorporated land has been developed; however, the potential for new growth is evident. The preservation of open space within urban settings is very crucial to quality of life and community well-being.

Population

The Mountainland area is comprised of three counties located in north central Utah having an estimated combined population of 588,003 residents. Over the past few years each of these counties have experienced widespread growth equaling a 30% growth since the 2000 census. While most growth is infill development within urbanized areas, population is continuing to into areas with increase hazard potential.

According to the 2010 Census, the Mountainland area encompasses 5,050 square miles of geography but, as discussed earlier, the population is mostly confined to incorporated areas.

Population Distribution in the Mountainland Region

Mountainland Region Population By County and Multi-County District 2000-2060

	Census		Short Range Projection			Long Range Projection		
	2000	2010	2015	2020	2030	2040	2050	2060
MOUNTAINLAND REGION	413,487	576,418	629,723	746,796	934,540	1,150,420	1,381,418	1,602,441
SUMMIT COUNTY	29,736	36,324	39,633	45,491	56,890	71,433	88,334	107,671

UTAH COUNTY	368,540	516,564	575,205	668,564	833,101	1,019,828	1,216,695	1,398,074
WASATCH COUNTY	15,215	23,530	29,161	32,741	44,549	59,159	76,389	96,696

Sources: U.S. Bureau of the Census; Utah Population Estimates Committee;

2012 Baseline Projections, Governor’s Office of Planning and Budget, UPED Model System.

Notes: AARC is average annual rate of change. 2000 and 2010 populations are April 1 U.S. Census modified age, race and sex (MARS) populations; 2000 populations are April 1 U.S. Census summary file 1 (SF1) populations; all others are July 1 populations.

The resident population of the Mountainland Area has increased steadily since the last census was taken. The region, in 2010, showed an overall population of 576,418 residents, nearly 90% of which live within the boundaries of Utah County. With an annual growth rate of over 2.5% projected through the year 2020 for the region, the area ranks high in population growth compared to almost anywhere else in the United States. An interesting statistic generated by the State of Utah suggests that annual employment growth for the region hovers right at 3% for the same time period, suggesting a possible decrease in the already low unemployment rate, or a significant increase of in-migrating workers to fill the jobs becoming available. A third scenario could be a change in the mix of those in the workforce to include a number from the ranks of those not currently seeking employment, like the elderly, or possibly spouses not now working. Chances are good that the actual reason for the change will be a combination of all three possibilities.

Population by Race and Hispanic Origin Mountainland Counties, 2010 (most recent available)						
	White	Black	Amer. Indian Aleut, Eskimo	Asian or Pac. Isle	Hispanic	% Minority Pop
Summit	33,442	235	243	785	4,190	9.5
Utah	474,695	4,795	5,867	19,240	55,793	10.6
Wasatch	21,584	125	232	338	3,184	8.3
Region	529,721	5,155	6,342	20,363	63,167	8.1

Source: US Census Bureau, Census 2010

Economy

The economy of the area could be characterized as moderate in some sectors, but with several real concerns and challenges to be addressed. The first is the fact that the region has a very low per capita income level. Large families and low pay scales make for a somewhat unique situation which forces skilled labor out of the area, or in many cases, a second wage earner (usually the spouse) takes a low paying, low skill job to help make ends meet. There is a sense that underemployment is a related problem, although trying to measure underemployment is difficult and the usual data providers do not disseminate the numbers if they are tracked. The sense of home and community is strong in Utah and many seem willing to find alternate, less fulfilling employment rather than moving out of state for better positions.

Another challenge to the economy is the uneven distribution of businesses within the district. Utah County mostly drives the region's labor statistics, especially within the Provo-Orem geographical area; however, other parts of the district don't share much in this business boom. Smaller outlying communities in Summit and Wasatch County, and even southern Utah County, may be struggling to find new business growth and don't share in the prosperity of the sales activity and tax distribution of their neighbors. In other words, the district may experience a 4.9% unemployment rate, but a small rural town might struggle with a 10% or higher rate, taking little comfort in knowing the region is doing so well! With 57% of all labor force non-agricultural jobs showing up in the service and retail trade sectors, there is plenty of cause for concern in the future when the demand for such services could wane because personal spending is curtailed. The regional economy has moved forward in many important ways since district designation twenty-two years ago, but further diversification and balance in the types of jobs available within the region would certainly better stabilize the economy to some extent so that in a downturn, large layoffs and reductions in lower paying jobs would not affect so many workers.

The University of Utah's Bureau of Economic and Business Research publishes a report summarizing the economies of each of Utah's twenty-nine (29) counties. Excerpts of that study are shown in each county's section of the Plan to direct some focus on the economic growth that each Mountainland county has experienced in recent years. It shows a fairly substantial rise in income and sales in each case although there may be some signs of slowing, especially in Utah County, where new residential construction seems to be tapering off compared to preceding years. Some slowing of the region economy is likely to occur during the following decade, especially with the events of 9/11, the tech stock bust, corporate corruption and war with Iraq.