

# **RICH COUNTY – COMMUNITY HAZARD MITIGATION GOALS AND STRATEGIES**

Hazard mitigation goals in this plan are similar to those identified in the 2004 plan. While mitigation goals have not drastically changed, many of the specific mitigation strategies to accomplish those goals have. The following goals were identified to direct community hazard mitigation strategies. These goals were developed based on the local official surveys in 2004 and 2008 (See appendix A), input from the Bear River Region PDM Technical Planning Team in 2004, and input from the Steering Committee in 2004.

## **Goal #1: Protect Current Residents and Property**

- Improve emergency response capabilities.
- Improve the disaster resistance of existing infrastructure and critical facilities.
- Build capacity of citizens to undertake mitigation activities through education and training.
- Build technical GIS and analysis capacity for communities to help identify hazards and risks to hazards.

## **Goal #2: Protect Future Residents and Property**

- As appropriate, develop and implement regulatory mechanisms to ensure new development activities will not increase the risk to life or property from natural hazards.
- Build technical GIS and analysis capacity for communities to help identify hazards and risk to hazards for future residents and their property.
- Empower future citizens to make informed choices through access to better data and more resources.

To accomplish these goals, specific mitigation strategies were developed by participating jurisdictions with assistance from working groups and BRAG staff. These strategies were assigned a priority of high, medium, or low by communities and through BRAG staff assistance according to the following criteria:

- Potential number of people protected by the project
- Technical feasibility
- Political support
- Available funding and priorities
- Environmental impacts

A guiding factor in prioritizing mitigation strategies was the principle that mitigation should provide the greatest amount of good to the greatest number of people, after considering funding opportunities and constraints. Recurrence intervals, past events, and damage estimates compiled during the assessment of vulnerability in this plan were also considered for priority and timeline values. While there was not a technical benefit-cost analysis regarding mitigation strategies during this planning process, the above criteria were considered for prioritization.

**RICH COUNTY - COMMUNITY MITIGATION STRATEGIES**

**Protecting Current Residents and Property**

<b>Jurisdiction</b>	<b>Hazard</b>	<b>Goal</b>	<b>Action</b>	<b>Action (For NFIP Compliance, if Applicable)</b>	<b>Priority (High, Medium, Low)</b>	<b>Time-frame (Year)</b>	<b>Potential Funding Sources</b>	<b>Estimated Cost</b>	<b>Resources</b>
Bear River Region	All	Protect current residents and property	County-wide emergency preparedness fair (maybe combine with Cache County)	N/A	High	2011	Counties, BRAG	Minimal	BRAG, Counties, Be Ready Utah, Utah DESHS, local communities, Utah FFSL, GOPB, LEPC's, local HAM radio groups, UGS, NRCS (snow), National Weather Service, LDS Bishops Storehouse, Food Bank, Cache County
Bear River Region	Severe Weather	Protect current residents and property	Public education/training including 3-5 day power outage survival, emergency response (CERT), emergency shelter locations, emergency kits, backup utilities, livestock issues, and interoperable emergency communications planning.	N/A	High	2011	Counties, Utah ESHS, BRAG, Cities, FEMA	\$50,000	Counties, Utah ESHS, BRAG, Cities, FEMA, NOAA
Bear River Region	Agricultural	Protect current residents and property	Encourage crop diversity, weed and pest management, and coordination with local, State, and Federal agencies on agricultural land management and production.	N/A	Medium	2011	Utah Department of Agriculture and Food, USDA, USU Extension, USFS, BLM	Minimal	Utah Department of Agriculture and Food, USDA, USU Extension, USFS, BLM,
Bear River Region	Agricultural	Protect current residents and property	Work with various agencies to plan for and mitigate economic losses associated with stock loss due to disease.	N/A	Medium	2011	Utah Department of Agriculture and Food, USDA, USU Extension	minimal	Utah Department of Agriculture and Food, USDA, USU Extension, US Food and Drug Administration, Center for Disease Control
Bear River Region	Agricultural	Protect current residents and property	Prepare an Emergency Services Function for County Emergency Operations Plans	N/A	Medium	2013	Local	Minimal	Local
Bear River Region	Agricultural	Protect current residents and property	Educate residents on crop insurance program, alternative planting and CRP programs, value of agriculture, pest control, crop diversity, urban tree planting guidelines, etc.	N/A	Medium	2011	State, Local, USDA	Minimal	State, Local, USDA
Bear River Region	Drought	Protect current residents and property	Discuss purchasing agricultural water rights for culinary water on a county and local level	N/A	High	2011	County, Local	Minimal	County, Local
Bear River Region	Drought	Protect current residents and property	Explore possibility of water wise landscaping ordinances	N/A	High	2011	Counties, Municipalities, BRAG	minimal	Counties, Municipalities, BRAG, USU Extension, NRCS, Utah League of Cities and Towns, GOPB
Bear River Region	Drought	Protect current residents and property	Study feasibility of increasing current water storage capabilities	N/A	Low	2013	Utah ESHS, BRAG	Minimal	Utah ESHS, BRAG
Bear River Region	Drought	Protect current residents and property	Encourage water conservation techniques for all land uses.	N/A	High	2011	Utah DEQ, USDA, Utah Agriculture and Food, Utah APA	minimal	Utah DEQ, USDA, Utah Agriculture and Food, Utah APA
Bear River Region	Earthquake	Protect current residents and property	Update geologic hazards data in the local General Plans and ordinances with new data available from the Utah Geologic Survey and the US Geological Survey	N/A	High	2011	Local, BRAG	Minimal	Local, BRAG, County, UGS, USGS, Utah ESHS
All Bear River Region jurisdictions that do not participate in NFIP	Flood	Protect current residents and property	Talk with the Utah ESHS about the benefits of the NFIP program and consider joining so residents can purchase flood insurance.	Talk with the Utah ESHS about the benefits of the NFIP program and consider joining so residents can purchase flood insurance.	High	2010	Local	Minimal	Utah ESHS, Local, FEMA
Rich County	Dam Failure	Protect current residents and property	Work with the Utah Division of Water Rights and other groups to implement Emergency Action Plans on a local level.	N/A	Low	2011	Utah Division of Water Rights, Local	Minimal	Utah Division of Water Rights, Local

Rich County	Earthquake	Protect current residents and property	Plan for growth along fault lines through planning & zoning	N/A	Low	2010	FEMA, UDHLS, Local, County	Minimal	BRAG, USU
Rich County	Landslide	Protect current residents and property	Minimize damage to roads	N/A	Low	2010	FEMA	Minimal	FEMA
Rich County	Earthquake/ Liquefaction	Protect current residents and property	Liquefaction studies	N/A	High	2010	FEMA	\$100,000+	Utah Geological Survey, USGS, County, Local
Rich County	Wildfire	Protect current residents and property	Prevention, education, vegetation management training, HOA wildfire protection plan	N/A	High	2010	FEMA, UDHLS, BLM, USFS, FFSL	Minimal	FEMA, UDHLS, BLM, USFS, FFSL
Rich County	Flood	Protect current residents and property	Identify risks, specifically Woodruff	Identify risks, specifically Woodruff	Medium	2010	FEMA	None	FEMA, UDHLS, ACE
Garden City	Flood	Protect current residents and property	Identify risks, educate community, talk to State Floodplain Manager	Identify risks, educate community, talk to State Floodplain Manager	Medium	2010	FEMA	Minimal	FEMA, Utah ESHS, US ACOE
Garden City	Flood	Protect current residents and property	Rescue procedures, identify risks, life safety	N/A	Medium	2010	Local	Minimal	Local
Garden City	Tsunami	Protect current residents and property	Develop Emergency Response Plan specific for a Tsunami	N/A	Medium	2010	FEMA, Utah ESHS, Local	Minimal	FEMA, Utah ESHS, Local,
Garden City	Earthquake	Protect current residents and property	Identify risks, prepare emergency management plan for earthquakes - explore possibility of damages from fault damage zones and liquefaction, rescue procedures	N/A	High	2011	FEMA, UGS, USGS	Minimal	FEMA, UGS, USGS
Garden City	Fire (Residential)	Protect current residents and property	Develop emergency plan as per S.O.P.'s for structure fires	N/A	High	2009	Local	Minimal	Local
Garden City	Wildfire	Protect current residents and property	Training, public awareness, homeowner education on mitigation of wild land fires	N/A	High	Continually	Local	Minimal	Local, USFS, Utah FFSL
Garden City	Wildfire	Protect current residents and property	Vegetation management, discuss wildfire protection plan for areas not covered under other plans	N/A	High	2010	Utah FFSL	Minimal	Utah FFSL
Garden City	Mass Casualty	Protect current residents and property	Extrication, life safety, intervention	N/A	High	2010	Local	Minimal	Local
Garden City	HAZMAT	Protect current residents and property	Protect life, protect environment, and protect natural resources	N/A	High	2009	Northern Region HAZMAT	TBD	Logan HAZMAT team, Garden City Fire District
Laketown	Wildfire	Protect current residents and property	Create fire break on east side of town	N/A	High	2010	Local, Utah FFSL	TBD	Local, Utah FFSL, County
Laketown	Earthquake	Protect current residents and property	Plan for growth along fault lines through planning & zoning and update fault location data	N/A	High	2010	FEMA, UDHLS, Local, County	Minimal	BRAG, USU, UGS, USGS
Randolph	Wildfire	Protect current residents and property	Work with the Utah Division of Forestry, Fire, and State Lands to determine wildfire risk. Plan accordingly to minimize damage to structures.	N/A	High	2010	Utah FFSL, Local	Minimal	Utah FFSL, Local, BLM, USFS
Woodruff	Dam Failure	Protect current residents and property	Work with the Utah Division of Water Rights and other groups to implement Emergency Action Plans on a local level.	N/A	Low	2011	Utah Division of Water Rights, Local	Minimal	Utah Division of Water Rights, Local
Woodruff	Flood	Protect current residents and property	County wide education/prevention, identify risks	County wide education/prevention, identify risks	Medium	2011	FEMA	Minimal	FEMA, UDHLS, ACE

**RICH COUNTY - COMMUNITY MITIGATION STRATEGIES**

**Protecting Future Residents and Property**

<b>Jurisdiction</b>	<b>Hazard</b>	<b>Goal</b>	<b>Action</b>	<b>Action (For NFIP Compliance, if Applicable)</b>	<b>Priority (High, Medium, Low)</b>	<b>Time-frame (Year)</b>	<b>Potential Funding Sources</b>	<b>Estimated Cost</b>	<b>Resources</b>
Bear River Region	All	Protect future residents and property	County-wide emergency preparedness fair	N/A	High	2010	Counties, BRAG	Minimal	BRAG, Counties, Be Ready Utah, Utah DESHS, local communities, Utah FFSL, GOPB, LEPC's, local HAM radio groups, UGS, NRCS (snow), National Weather Service, LDS Bishops Storehouse, Food Bank
Bear River Region	Severe Weather	Protect future residents and property	Discuss planning needs on the county and city levels to coordinate land use regulations regarding development in flood, landslide, and wildfire hazard areas and Severe Weather events and response. This would be intended to prevent damages from extreme weather trigger events and incorporate severe weather into current response plans.	N/A	Medium	2011	Counties, Municipalities, BRAG	Minimal	Counties, Municipalities, BRAG, Utah ESHS, Army Corps., Be Ready Utah, FFSL, LEPC, NOAA, NRCS
Bear River Region	Agricultural	Protect future residents and property	Encourage crop diversity, weed and pest management, and coordination with local, State, and Federal agencies on agricultural land management and production.	N/A	Medium	2011	Utah Department of Agriculture and Food, USDA, USU Extension, USFS, BLM	Minimal	Utah Department of Agriculture and Food, USDA, USU Extension, USFS, BLM,
Bear River Region	Agricultural	Protect future residents and property	Work with various agencies to plan for and mitigate economic losses associated with stock loss due to disease.	N/A	Medium	2011	Utah Department of Agriculture and Food, USDA, USU Extension	minimal	Utah Department of Agriculture and Food, USDA, USU Extension, US Food and Drug Administration, Center for Disease Control
Bear River Region	Agricultural	Protect future residents and property	Prepare an Emergency Services Function for County Emergency Operations Plans	N/A	Low	2013	Local	Minimal	Local
Bear River Region	Agricultural	Protect future residents and property	Educate residents on crop insurance program, alternative planting and CRP programs, value of agriculture, pest control, crop diversity, urban tree planting guidelines, etc.	N/A	Medium	2011	State, Local, USDA	Minimal	State, Local, USDA
Bear River Region	Drought	Protect future residents and property	Discuss purchasing agricultural water rights for culinary water on a county and local level	N/A	High	2011	County, Local	Minimal	County, Local
Bear River Region	Drought	Protect future residents and property	Explore possibility of water wise landscaping ordinances, and encourage water conservation for all land uses.	N/A	High	2010	Counties, Municipalities, BRAG	minimal	Counties, Municipalities, BRAG, USU Extension, NRCS, Utah League of Cities and Towns, Utah DEQ, USDA, Utah Agriculture and Food, Utah APA
Bear River Region	Drought	Protect future residents and property	Study feasibility of increasing current water storage capabilities	N/A	Low	2013	Utah ESHS, BRAG	Minimal	Utah ESHS, BRAG
Bear River Region	Drought	Protect future residents and property	Encourage water conservation techniques for all land uses.	N/A	High	2011	Utah DEQ, USDA, Utah Agriculture and Food, Utah APA	minimal	Utah DEQ, USDA, Utah Agriculture and Food, Utah APA
Bear River Region	Earthquake	Protect future residents and property	Update geologic hazards data in the local General Plans and ordinances with new data available from the Utah Geologic Survey and the US Geological Survey	N/A	High	2011	Local, BRAG	Minimal	Local, BRAG, County, UGS, USGS, Utah ESHS
All Bear River Region jurisdictions that do not participate in NFIP	Flood	Protect future residents and property	Talk with the Utah ESHS about the benefits of the NFIP program and consider joining so residents can purchase flood insurance.	Talk with the Utah ESHS about the benefits of the NFIP program and consider joining so residents can purchase flood insurance.	High	2010	Local	Minimal	Utah ESHS, Local, FEMA

Rich County	Dam Failure	Protect future residents and property	Work with the Utah Division of Water Rights and other groups to implement Emergency Action Plans on a local level.	N/A	Low	2010	Utah Division of Water Rights, Local	Minimal	Utah Division of Water Rights, Local
Rich County	Earthquake	Protect future residents and property	Plan for growth along fault lines through planning & zoning	N/A	Low	2010	FEMA, UDHLS, Local, County	Minimal	BRAG, USU
Rich County	Landslide	Protect future residents and property	Minimize future development in landslide areas near Hodges Canyon	N/A	Low	2010	FEMA	Minimal	FEMA
Rich County	Earthquake/ Liquefaction	Protect future residents and property	Liquefaction studies	N/A	High	2010	FEMA	\$100,000+	Utah Geological Survey, USGS, County, Local
Rich County	Wildfire	Protect future residents and property	Planning and zoning, fire flow storage, wildfire protection plan	N/A	High	2010	Utah FFSL	Minimal	Utah FFSL, Fire districts, wildfire FF training
Rich County	Flood	Protect future residents and property	Planning	Planning	Low	2010	FEMA	None	FEMA, UDHLS, ACE
Garden City	Flood	Protect future residents and property	Explore possibility of a floodplain map	Explore possibility of a floodplain map	Low	2012	FEMA	TBD	FEMA, Utah ESHS, US ACOE
Garden City	Tsunami	Protect future residents and property	Develop Emergency Response Plan specific for a Tsunami	N/A	Medium	2010	FEMA, Utah ESHS, Local	Minimal	FEMA, Utah ESHS, Local,
Garden City	Earthquake	Protect future residents and property	Identify risks, prepare emergency management plan for earthquakes - explore possibility of damages from fault damage zones and liquefaction, rescue procedures	N/A	High	2011	FEMA, UGS, USGS	Minimal	FEMA, UGS, USGS
Garden City	Wildfire	Protect future residents and property	Plan for adequate storage for fire protection, wildfire protection plan	N/A	High	2010	Utah FFSL	Minimal	Utah FFSL
Laketown	Wildfire	Protect future residents and property	Create fire break on east side of town	N/A	High	2010	Local, Utah FFSL	TBD	Local, Utah FFSL, County
Laketown	Earthquake	Protect future residents and property	Plan for growth along fault lines through planning & zoning and update fault location data	N/A	High	2010	FEMA, UDHLS, Local, County	Minimal	BRAG, USU, UGS, USGS
Randolph	Wildfire	Protect future residents and property	Work with the Utah Division of Forestry, Fire, and State Lands to determine wildfire risk. Plan accordingly to minimize damage to future development.	N/A	High	2010	Utah FFSL, Local	Minimal	Utah FFSL, Local, BLM, USFS
Woodruff	Dam Failure	Protect future residents and property	Work with the Utah Division of Water Rights and other groups to implement Emergency Action Plans on a local level.	N/A	Low	2010	Utah Division of Water Rights, Local	Minimal	Utah Division of Water Rights, Local
Woodruff	Flood	Protect future residents and property	County wide education/prevention, identify risks	County wide education/prevention, identify risks	Medium	2010	FEMA	Minimal	FEMA, UDHLS, ACE