

## **DRAFT GOALS AND MITIGATION ACTIONS (11/23/2008)**

### **How the Goals and Mitigation Actions Were Developed**

The goals and actions that follow were developed by the contractor, deputy county coordinator, and the advisory committee after consideration of:

- the history of hazards in the county,
- the probability of future occurrences,
- the vulnerability of key systems and facilities,
- the projects that were identified in the 2004 plan,
- available resources and capacities, and
- several disaster scenarios.

### **Problem Statements**

At the October 21 meeting, the Advisory Committee generated three possible disaster scenarios. Potential impacts of each scenario were listed. From these impacts, problem statements were developed.

Many impacts or problems would be common to more than one of the following scenarios or even other scenarios that were not discussed. The problems that could occur in more than one scenario suggest mitigation actions that are “robust” because they address a number of disaster possibilities and are likely to be cost-effective. The problem statements that apply to more than one scenario are given at the end of the scenarios. The problem statements that apply to only one scenario are provided under that scenario.

Scenario One: A 7.5 magnitude earthquake occurs along the Teton Fault.

- A number of areas become inaccessible because the earthquake severely damages or destroys a number of highway and other bridges.
- The earthquake causes one or more of the high hazard dams to breach or wash out.

Scenario Two: A severe winter storm closes all highways in and out of the valley.

Scenario Three: A hazardous material spill or terrorist attack occurs on Town Square when it is filled with people.

- A half-mile radius must be evacuated. That half-mile contains key transportation intersections, the Emergency Operations Center, Sheriff's Office, Police Station, and town and county government offices.

Problems that could occur under two or more scenarios.

- Power is lost in the valley.
- With the loss of electricity, people lose primary heat source.
- Cell, landline and radio communications could be compromised or inadequate.
- Natural gas pipeline breaks.
- There is no ability to warn people.
- Significant damage could occur to public and private buildings and there is not an adequate number of inspectors to determine what is safe.
- The airport is closed either due to inclement weather or runway damage, eliminating a means of getting people and supplies in and out of the valley.
- Landslides close roads.
- Emergency response personnel can not report to work.
- DOT and public works equipment operators can not get to the equipment and can not get the roads and highways cleared of debris and/or snow.
- Commuting workers in the valley can not get home.
- A large number of visitors may be stranded in Jackson or other areas of the valley. Some areas do not have the ability to shelter. Some stranded visitors and/or residents may not speak English.
- Alta could be shut off from the rest of the county.
- Mass casualties overwhelm medical resources.
- Key emergency response facilities may be damaged or unavailable.
- Food and supplies can not get into the valley and run low or run out.
- People panic.

#### Additional Problems

- New construction may be occurring in areas with natural hazards because there is no comprehensive map of hazard areas for the county.
- Large numbers of skiers could be trapped at Grand Targhee if the access road becomes impassable.

## GOALS AND MITIGATION ACTIONS

Each goal statement below is followed by a table giving information about the specific mitigation actions or projects. The actions vary in cost and in priority. Costs were estimated to fall within three ranges and assigned a low, medium, or high rating.

High priority projects from the 2004 plan that have not been completed, are not underway, are still appropriate, and are specific enough to bring forward are incorporated into the project lists under each goal.

Low Cost Projects: from \$0 to \$5000

Medium Cost Projects: from \$5001 to \$25,000

High Cost Projects: \$25,001 and over.

Priority rankings were also assigned by the contractor and Deputy County Emergency Management Coordinator based on a low, medium, and high system.

High Priority Projects: projects identified in response to one or more of the highest probability hazards combined with the ability to save lives.

Medium Priority Projects: projects associated with a less probable hazard with potential to save lives or damage to property.

Low Priority Projects: projects that are associated with low or infrequent hazard probability and least likely to prevent loss of life.

A full range of types of mitigation actions or projects were identified by the participants in the planning process. Project type is shown in the tables in this chapter designated by one or more letters corresponding to the following types;

- P Prevention
- PR Preparation
- PP Property Protection
- EA Education and Awareness
- NRP Natural Resource Protection
- S Structural Projects
- C Coordination

**GOAL ONE: Increase the disaster-resistance of the transportation infrastructure and prepare to respond effectively when transportation routes are compromised.**

#	Description	Priority	Cost	Type	Who
1.a	Assess all state highway bridges for seismic vulnerability	High	High	P, PR, NRP, S	WYDOT FHWA Geol. Survey
1.b	Assess secondary road and private bridges for seismic vulnerability	Med	High	P, PR, NRP, S	WYDOT Geol. Survey, Teton Co Road and Levy
1.c	Assess the town bridges for seismic vulnerability	Med	Med		Jackson Public Works
1.d	Prioritize mitigation of seismic issues on public and private bridges and begin mitigation	High	High	P, PR, NRP, S	LEPC, WYDOT FHWA Geol. Survey, County Road and Levy, Jackson Public Works
1.e	Identify nearest resources for installation of temporary bridges	Med	Med	P, PR, NRP, S	WYDOT, Emergency Management, National Guard
1.f	Work with town and county building inspection depts. to train a volunteer cadre of engineers and architects for emergency bridge inspections	Med	Med	PR, PP, S	WYDOT, Emergency Management, Jackson and Teton County building depts..
1.g	Develop a plan of transportation alternatives to get emergency responder personnel into the valley	High	Low	P, PR, C	LEPC
1.h	Fund and complete Fire/EMS Capital Improvements Priority 14, reconstruction of Wilson Fire Station	High	High	P, PR, PP, NR, S	Town, County, Fire/EMS

**GOAL TWO: Be prepared for isolation of and within the valley.**

#	Description	Priority	Cost	Type	Who
2.a	Negotiate agreements with the lodging association for rates during emergencies	Med	Low	PR, C	Emergency Management, Lodging Association
2.b	Calculate the # of hotel beds available for emergency housing and use this as a trigger for opening shelters	Med	Low	PR, C	Emergency Management, Red Cross
2.c	Negotiate and sign an agreement with one lodging establishment to provide the lodging for emergency responders without homes in the valley during an emergency.	High	Low	PR, C	Emergency Management
2.d	Work with local food bank and grocery stores to develop a plan for providing food during an emergency.	Med	Low	PR, C	Emergency Management, Public Health, Grocery Stores, Food Bank, Red Cross
2.e	Work with hospital and pharmacies to develop a plan to ensure medicines can be obtained, delivered during an emergency.	High	Low	PR, C	Emergency Management, St. Johns, Pharmacies, Public Health
2.f	Acquire a helicopter (with neighboring counties) to airlift critical personnel and supplies into valley.	Med	High	PR, C	Emergency Management, Town and County
2.g	Ensure commuting workers are prepared to be cut-off from home. Stress contingency and communication plans and 72-hour kits.	High	Low	P, PR, C	Emergency Management, Red Cross

2.h	Develop a resource list of volunteer capabilities for emergency support in the valley.	Med	Low	C	Red Cross, Emergency Management
2.i	Fund and complete Fire/EMS Capital Project Priority #1, new station at Hoback	High	High	P, PR, PP, NRP, S	Town, County, Emergency Management
2.j	Fund and complete Fire/EMS Capital Project #21, new fire station at Jackson Hole Golf and Tennis	High	High	P, PR, PP, NRP, S	Town, County, Emergency Management
2.k	Purchase/install mobile incident command capability in five police vehicles(@\$500/ea)	High	Med	PR, C	Town, Emergency Management
2.l	Monitor state policy development on amateur radio operations and emergency management. Integrate amateur radio resources into the communications system.	Med	Low	PR, C	Emergency Management, ECHOJH
2.m	Host a demonstration of IRLP capability	Low	Low	C	ECHOJH
2.n	Create a small cache of pre-programmed back-up portable radios	Med	High	PR, C	Emergency Management, Fire/EMS, Law enforcement

**GOAL THREE: Increase awareness of hazards by residents and developers.**

#	Description	Priority	Cost	Type	Who
3.a	Offer 2 CERT courses per year	High	Low	P, EA	Emergency Management Red Cross
3.b	Offer 2-4 weather spotter courses per year	Med	Low	P, EA	Emergency Management NOAA
3.c	Offer course on need and how to assemble a 72-hour kit—include addressing back-up heat sources	High	Low	P, EA	Emergency Management
3.d	Develop and run avalanche public service announcements	High	Low	P	Emergency Mangement, Avalanche Center
3.e	Develop a detailed hazard map for the county that can be used to ensure proposed development is not occurring in areas of high hazard vulnerability	High	Med	PR, PP, NRP, C	County Planning, Emergency Management, WYOHS, Geological Survey
3.f	If/when loss of life or a disaster occurs follow-up with news releases on planning and prep that could have minimized or prevented loss	Low	Low	P, EA	Emergency Management

**GOAL FOUR: Be ready to respond to the inevitable winter storms.**

#	Description	Priority	Cost	Type	Who
4a	Continue to monitor slide areas, close roads as necessary, and prioritize response to incidents	High	Low	PR, NRP	WYDOT, County Road and Levy, Jackson Public Works
4b	Install snow support structures to stop slides on S89	High	Med	P	WYDOT, Forest Service

**GOAL FIVE: Reduce potential damage, injury and loss of life from earthquake hazard.**

#	Description	Priority	Cost	Type	Who
5.a	Identify critical private facilities and infrastructure. Assess seismic vulnerability. (hospital, utilities, etc.)	Med	High	P, PR, PP, S	WY Geol. Survey, Emergency Management, Property Owners
5.b	Identify critical public infrastructure (water, sewer, roads)	Med	High	PR, PP, NRP, S	Town and county, Emergency Management
5.c	Identify and pursue fund sources for seismic mitigation projects	Med	Low	C	Town and County, Emergency Management, WYOHS, FEMA
5.d	Train volunteer cadre of structure inspectors to do safety assessments of critical buildings following a seismic event	Low	Med	PR, P, S, C	Town and county inspectors, Emergency Management

**GOAL SIX: Be prepared to respond to a Hazmat incident.**

#	Description	Priority	Cost	Type	Who
6.a	Conduct a placard count to determine the amount and type of hazmat moving through the county	Med	Med	PR	Emergency Management Fire Department WYDOT
6.b	Equipment	High	Med	PR	Town and County
6.c	Fund and implement Fire/EMS Capital Improvements Project #6 Training Facility Improvemnt	High	High	P, PR, NRP	Town, County, Emergency Management
6.d.	Training	High	Med	PR	Town and County, WYOHS

**GOAL SEVEN: Minimize potential losses from flooding and wind events.**

#	Description	Priority	Cost	Type	Who
7.a	Continue participation in National Flood Insurance Program	High	Low	P, PP, S	Town, County, property owners
7.b	Continue monitoring frazile ice build-up in Flat Creek. Implement mitigation plan to prevent flooding from the ice.	Med	Med	PP, NRP	WYOHS, FEMA, Town, U.S. Army Corp
7.a	Bury all overhead electrical lines in the corporate limits of Jackson	Med	High	P, PP, S	Town, Utility, FEMA
7.b	Finish implementation of hazard tree reduction program in Jackson	Med	Med	P, PP, S	Town

**GOAL EIGHT: Reduce vulnerability to terrorism.**

#	Description	Priority	Cost	Type	Who
8.a	Review and upgrade security procedures for access to local government buildings and sites	High	Med	PR, S	Emergency Management, Jackson PD, Teton Co, Sheriff
8.b	Proceed with hardening potential targets identified in homeland security assessment	Med	High	PR, S	Town and County Law Enforcement, WYOHS
8.c	Provide training in WMD	Med	Med	PR	WYHOS
8.d	Identify mental health resources available locally	Med	Low	PR, C	Emergency Management, Red Cross