



Hazard Mitigation Program 2010 Annual Report



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Bureau of Homeland Security

Hazard Mitigation Program

Statement of Purpose

The purpose of hazard mitigation is to implement actions that eliminate the risk from hazards or reduce the severity of the effects of hazards on people and property. Mitigation is considered any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event. Mitigation activities contribute to the resilience of Idaho's communities by:

- Encouraging long-term reduction of hazard vulnerability;**
- Reducing the enormous cost of disasters to property owners and all levels of government;**
- Protecting critical community facilities, reducing exposure to liability, and minimizing community disruption.**

Preparedness, response, and recovery measures support the concept of mitigation and may directly support identified mitigation actions.



Executive Summary

Under §46-1003, Idaho Code, the State Disaster Preparedness Act states that its policy and purpose is to prevent and reduce damage, injury, and loss of life and property resulting from natural or man-made catastrophes, riots, or hostile military or paramilitary action. The Bureau of Homeland Security (BHS) is directed to prepare, maintain, and update a state disaster plan based on the principle of self help at each level of government. The plan may provide for:

- prevention and minimization of injury and damage caused by disaster;
- identification of areas particularly vulnerable to disasters;
- authorization and procedures for the erection or other construction of temporary works designed to protect against or mitigate danger, damage, or loss from disaster;
- preparation and distribution to the appropriate state and local officials of catalogs of federal, state and private assistance programs.

In addition, BHS will participate in the development, review, and revision of local and intergovernmental disaster plans and will seek the advice and assistance of local government, business, labor, industry, agriculture, civic, and volunteer organizations and community leaders in preparing and maintaining the state disaster plan. In doing so, BHS will consider on a continuing basis steps that could be taken to prevent or reduce the harmful consequences of disasters.

Executive Order No. 2010-09 states that the role of state government is to support and enhance local community emergency response efforts including focusing state agency activities on supporting regional and community needs throughout Idaho. In accordance with §46-1006(1), Idaho Code, BHS is given the responsibility to develop and coordinate

the preparation and implementation of plans and programs for mitigation to prevent or reduce the harmful consequences of disasters and to ensure consistency of those plans with national plans and programs and with the State's emergency management goals and procedures.

To comply with Chapter §46, Idaho Code and Executive Order No. 2010-09, the Hazard Mitigation Program was established and is currently staffed by the State Hazard Mitigation Officer, Mitigation Planner, and a part-time Mitigation Program Assistant.

The *2010 State of Idaho Hazard Mitigation Plan* provides the basis for statewide hazard mitigation goals, strategies, and activities.

The *State of Idaho Hazard Mitigation Assistance Grant Programs Administrative Plan* provides the administrative guidance used to implement federal assistance programs from hazard.



State of Idaho

Hazard Mitigation Goals

In accordance with Chapter §46, Idaho Code, and Executive Order No. 2010-09, the 2010 update to the State Of Idaho Hazard Mitigation Plan identifies six goals of hazard mitigation.

- Save lives and reduce public exposure to risk from natural and man-made hazard events.
- Reduce or prevent damage to public and private property from natural and man-made hazard events.
- Enhance coordination between Federal, State, regional, Tribal, and local agencies and consistency of hazard impact reduction policy.
- Reduce adverse economic impacts of natural and man-made hazard events.
- Reduce adverse environmental or natural resource impacts from natural and man-made hazard events.
- Enhance vulnerability and risk assessments through development and collection of data.




State of Idaho

Hazard Mitigation Strategies

In support of the State's goals to reduce risks and impacts to the citizens, critical facilities, and infrastructure of Idaho from hazards and disaster events, the Hazard Mitigation Program has adopted the following strategies:

- Prevention activities that decrease future hazard losses by increasing hazard resistance;
- Property Protection activities that modify buildings or surroundings to prevent injury or damage;
- Public Education and Awareness activities to inform and remind people about hazardous areas and the actions that can be taken to minimize or prevent potential damage and injury;
- Natural Resource Protection activities that reduce the intensity of hazard effects and improve the quality of the environment and wildlife habitats;
- Critical Facilities Protection activities that contribute to the ability of communities to respond and recover from a hazard event;
- Structural Projects that involve the construction of man-made structures designed to control hazards.



State of Idaho

Hazard Mitigation

Key Customers

- Local Jurisdictions, i.e. County, City, and Town governments
- Special Purpose Districts
- State Agencies
- Tribal governments
- Certain registered private non-profit organizations providing like-government services and critical facilities.



2010 Hazard Mitigation Assistance (HMA) Grants Programs

FEMA's Hazard Mitigation Assistance Grants Programs consist primarily of five programs:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM) Grant Program
- Flood Mitigation Assistance (FMA) Program
- Repetitive Flood Claim (RFC) Program
- Severe Repetitive Loss (SRL) Program.

Currently, no RFC or SRL grants have been awarded to eligible jurisdictions within the State of Idaho. The State of Idaho anticipates no loss eligible under RFC or SRL.

2010 Grant Closeouts

All HMA Grants completed and closed out in 2010:

Total No. of Sub-grant Awards – 12

Total Award Amount: \$746,285.44

[Hazard Mitigation Grant Program \(HMGP\)](#)

HMGP-1592:

Total No. of Sub-grant Awards – 2

Total Sub-grant Award Amount - \$121,360.52

Note: All work for HMGP-1592 was completed 1-2 years ago.

- Recipient: State of Idaho Controller's Office

Project: Seismic Isolation Project

Cost: \$100,000.00

Benefit to Cost Ratio: 14.71

Description: To protect the SCO's computer server and data storage network during a seismic event, network computer servers, power units, and the tape retrieval robot system were mounted on ISO-Base seismic base isolation units in order to prevent damage and maintain operations.



Non-structural seismic mitigation for State Controller's Office

- Recipient: Bureau of Homeland Security

Project: Idaho Emergency Operations Center Non-Structural Retrofit

Cost: \$21,360.52

Benefit to Cost Ratio: 21.91

Description: To ensure the reliability and operational capability of the Information Technology Network for BHS and the Idaho Emergency Operations Center during a seismic event, all computer network server racks

and the rack-mounted HF and Micom radios were mounted and secured to base isolation units.

HMGP-1630:

Total No. of Sub-grant Awards – 1

Total Sub-grant Award Amount - \$181, 965.00

➤ Recipient: North Latah County Highway District

Project: North Viola Bridge Project

Cost: \$181, 965.00

Benefit to Cost Ratio: 9.56

Description: To reduce or eliminate the risk of upstream flooding of Four Mile Creek above the Viola Bridge site, the bridge was replaced with a pre-fabricated steel bridge allowing increased flow conveyance.



North Viola Bridge – Before and After Flood Mitigation Project

Pre-Disaster Mitigation (PDM) Grant Program

2007 PDM:

Total No. of Sub-grant Awards – 9

Total Sub-grant Award Amount - \$442,959.92

- Recipient: Bear Lake County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$48,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: January 28, 2010.
- Recipient: Bingham County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$29,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: January 28, 2010
- Recipient: Blaine County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$62,800.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: December 3, 2009
- Recipient: Bonner County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$63,159.92
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: June 3, 2010
- Recipient: Franklin County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$48,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: January 28, 2010

- Recipient: Jerome County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$48,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: February 23, 2010

- Recipient: Minidoka County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$48,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: April 8, 2010

- Recipient: Oneida County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$48,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: February 16, 2010

- Recipient: Power County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$48,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
FEMA Approval Date: April 8, 2010

Ongoing Projects

Total No. of Projects Ongoing – 10

Total Amount of all Awards Ongoing - \$1,971,925.28

2008 Flood Mitigation Assistance (FMA) Grant Program

Total No. of Sub-grant Awards – 1

Total Sub-grant Award Amount - \$53,400.00

- Recipient: Ada County
Project: All Hazard Mitigation Plan (AHMP) Update
Cost: \$53,400.00
Benefit to Cost Ratio: N/A
Description: Update to the flood portion of the county's All-Hazard Mitigation Plan.

2008 Pre-Disaster Mitigation (PDM) Grant Program

Total No. of Sub-grant Awards – 2

Total Sub-grant Award Amount - \$563,150.00

State Management Costs Sub-grant Award Amount - \$69,530.00

Total Award Amount - \$604,298.13

- Recipient: Clearwater County
Project: All Hazard Mitigation Plan (AHMP) Update
Cost: \$97,275.00
Benefit to Cost Ratio: N/A
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
- Recipient: Bureau of Homeland Security
Project: All Hazard Mitigation Plan (AHMP) Update
Cost: \$465,875.00
Benefit to Cost Ratio: N/A
Description: Comprehensive update to the State of Idaho's All-Hazard Mitigation Plan.

2008 Legislative Pre-Disaster Mitigation (LPDM) Grant Program

Total No. of Sub-grant Awards – 4

Total Sub-grant Award Amount - \$839,621.90

State Management Costs Sub-grant Award Amount - \$45,000.00

Total Award Amount - \$884,621.90

- Recipient: University of Idaho
Project: FireCorps: Fire Mitigation and Education in Valley County
Cost: \$455,151.90
Benefit to Cost Ratio: 3.067
Description: To reduce risk from fire to people and property in Valley County's wildland-urban interface (WUI), structural and non-structural retrofitting and vegetation management will occur at the UI McCall field campus and Ponderosa State Park. A fuels reduction and vegetation management project will decrease risk in the WUI. Wildfire mitigation workshops will be held to increase public awareness of the wildfire hazard.
- Recipient: Adams County
Project: Highlands Estates Wildfire Mitigation Project
Cost: \$200,000.00
Benefit to Cost Ratio: 1.15
Description: A vegetation management project in the WUI will reduce risk from fire to people and property in the Highlands Estates subdivision.
- Recipient: Idaho Department of Parks and Recreation
Project: Harriman State Park Fire Mitigation Project
Cost: \$60,000.00
Benefit to Cost Ratio: 6.776
Description: To reduce risk from fire to people and property in Harriman State Park, a vegetation management project will conduct a fuel hazard analysis, reduce fuels, and create a vegetation management plan.
- Recipient: Bureau of Homeland Security
Project: State of Idaho Public Safety Communication Sites – Wildfire Mitigation
Cost: \$124,470.00
Benefit to Cost Ratio: 2.414

Description: To reduce risk from fire to public safety communication sites in the State of Idaho, a wildfire mitigation project will reduce fuels, replace combustible structural materials with a non-combustible insulated Bally Modular building, bury propane tanks and utility lines, and enclose the generator at site #3.

2009 Pre-Disaster Mitigation (PDM) Grant Program

Total No. of Sub-grant Awards – 3

Total Sub-grant Award Amount - \$515,753.38

State Management Costs Sub-grant Award Amount - \$69,530.00

Total Award Amount - \$585,283.38

- Recipient: Fremont County
Project: Fremont County Roadway Flooding
Cost: \$326,000.00
Benefit to Cost Ratio: 2.44
Description: To reduce the risk of flooding on roadways, the project will install larger culverts to increase flow conveyance.
- Recipient: Ada County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$125,000.00
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
- Recipient: Latah County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$64,753.38
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.

Grants Awarded in 2010

Total No. of Sub-grant Awards – 8

Total Amount of all 2010 Awards - \$2,947,187.87

Hazard Mitigation Grant Program (HMGP) DR-1781-ID

Total No. of Sub-grant Awards – 1

Total Sub-grant Award Amount - \$16,750.00

➤ Recipient: Benewah County

Project: St. Joe Baldy Early Warning System*

Cost: \$16,750.00

Benefit to Cost Ratio: 9.56

Description: To provide emergency alert notification capability to the residents of southeast Benewah and southwest Shoshone counties, an Emergency Alert System (EAS) transmitter will be purchased and installed on St. Joe Baldy Mountain. A SAFE receiver box will be installed at KOFE Radio in St. Maries and NOAA Weather Tone Alert will be installed at the city halls of St. Maries, Plummer, and Tensed. The EAS system will provide emergency alert notifications to 8,000 residents and numerous recreationists.

Two additional project sub-applications have been submitted to FEMA and are currently undergoing the environmental/historic review.

➤ Sub-applicant: Shoshone County

Project: Silverton Stormwater / Flash Flood Project

Cost: \$215,000

Benefit to Cost Ratio: 1.05

Description: To reduce flood risk, a storm water collection and management system will be constructed for Sather Creek and two areas designated in the Town of Silverton Drainage Assessment .

➤ Sub-applicant: City of Coeur d'Alene

Project: Tubbs Hill Hazardous Fuels Treatment Project

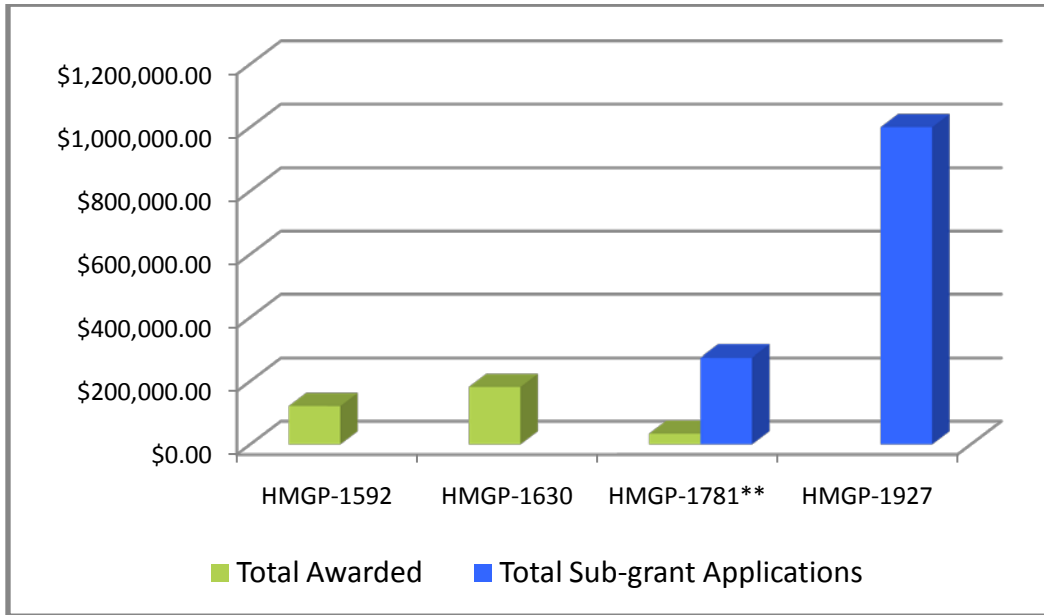
Cost: \$34,000.00

Benefit to Cost Ratio: 37.867

* The award to Benewah County is a 5% Initiative Project and is being processed currently.

Description: To reduce the risk to life and property from wildfire, a fuels reduction project will create low fuels buffer zones between private and public areas, provide access to high hazard areas for firefighting equipment and personnel, and promote forest health and recreational activities.

Comparison of Hazard Mitigation Grant Program (HGMP) Awards



**Award totals for HMGP-1781 are expected to change once FEMA's review process is complete.

2010 Flood Mitigation Assistance (FMA) Grant Program

To date, two sub-grantee planning projects submitted under the FY2009 FMA grant cycle have been funded under the FY2010 FMA grant cycle.

Total No. of Sub-grant Awards – 2

Total Sub-grant Award Amount - \$97,800.00

State Management Costs Sub-grant Award Amount - \$32,094.00

Total Award Amount - \$129,894.00

- Recipient: Bannock County
- Project: All-Hazard Mitigation Plan (AHMP) Update
- Cost: \$47,900.00
- Benefit to Cost Ratio: N/A

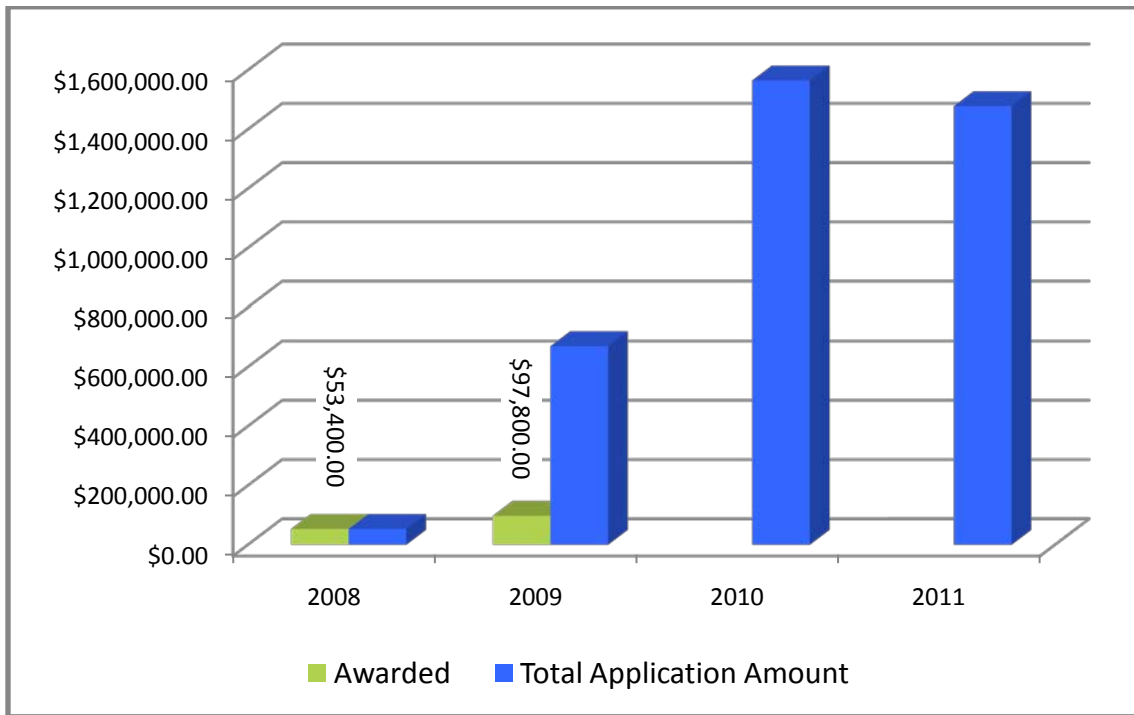
Description: Update to the flood portion of the county's All-Hazard Mitigation Plan.

- Recipient: Payette County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$49,900.00

Benefit to Cost Ratio: N/A

Description: Update to the flood portion of the county's All-Hazard Mitigation Plan.

Comparison of Flood Hazard Mitigation (FMA) Grant Program 2008-2011



2010 Pre-Disaster Mitigation (PDM) Grant Program

A total of twenty-three sub-grant applications were submitted to FEMA for the FY2010 PDM grant cycle. The nine applications selected for further review by FEMA have to go through the FEMA environmental / historical review and award process. Five sub-grants were awarded on August 20, 2010.

Total No. of Sub-grant Awards – 5

Total Sub-grant Award Amount - \$2,395,542.57

State Management Costs Sub-grant Award Amount - \$405,001.30

Total Award Amount - \$2,800,543.87

- Recipient: City of Lewiston
Project: Stormwater System Improvements
Cost: \$2,124,944.72
Benefit to Cost Ratio: 3.859
Description: To reduce flood risk, the City of Lewiston will update and rebuild a stormwater drainage system in the area of the city where most government buildings and offices are located. The project will also reduce flood risk to business and residential structures in the area.
- Recipient: Gem County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$93,750.00
Benefit to Cost Ratio: N/A
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
- Recipient: Payette County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$18,750.00
Benefit to Cost Ratio: N/A
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.
- Recipient: Elmore County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$38,000.00
Benefit to Cost Ratio: N/A

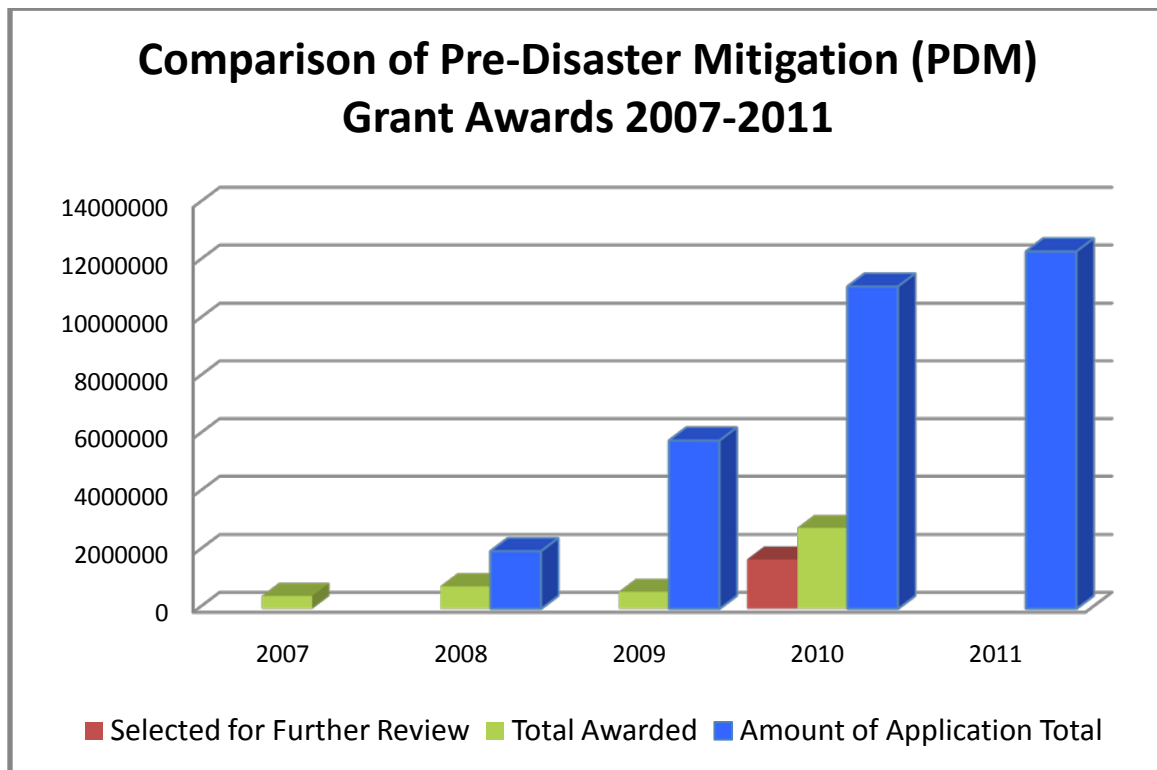
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.

- Recipient: Lewis County
Project: All-Hazard Mitigation Plan (AHMP) Update
Cost: \$51,006.25
Benefit to Cost Ratio: N/A
Description: Comprehensive update to the county's All-Hazard Mitigation Plan.

2010 PDM Awards Identified for Further Review

- Sub-applicant: North Idaho Correctional Institution
Project: North Idaho Correctional Institution Multi-Hazard Mitigation Project
Cost: \$1,461,581.13
Benefit to Cost Ratio: 1.708
Description: Project will mitigate the risk of multiple hazards, including wildfire and severe storms, by creating defensible space around the facility's perimeter, removing hazardous or flammable fuels, and reducing fuels with tree removal and thinning. To protect structures, wood siding will be replaced with fire-resistant siding. To protect critical infrastructure, power lines into and through the facility will be buried and generators will be installed.
- Sub-applicant: City of Bellevue
Project: City of Bellevue Flood Mitigation Project
Cost: \$71,400.00
Benefit to Cost Ratio: 2.329
Description: To protect city water and sewer lines and road access to utilities, the project will install bank rehabilitation measures to reduce flooding on the Wood River at the head of District #45 Canal.
- Sub-applicant: Blaine County
Project: Deer Creek Bridge / Bank Protection Project
Cost: \$245,282.00
Benefit to Cost Ratio: 1.693
Description: To reduce flood risk and protect the Deer Creek Bridge and roadway, the project will stabilize the west bank of the Big Wood River upstream of the Deer Creek Bridge.

- Sub-applicant: City of Mountain Home
 Project: City of Mountain Home E 8th N Stormwater Corridor Improvement Project
 Cost: \$444,448.00
 Benefit to Cost Ratio: 1.333
 Description: To reduce risks and potential damage from flooding from significant storm events, the project will install underground piping to reduce the amount of stormwater flowing along the street.



Earthquake Hazard Reduction Grant Program (EHRP)

EHRP grant funds are awarded to the Bureau of Homeland Security for projects to reduce risk from seismic hazards in the State of Idaho.

2009 EHRP

Total No. of Projects – 3

Total Award Amount - \$51,351.00

- Task 1: State of Idaho Earthquake Structure Dataset Creation
Cost: \$40,851.00
Description: Project will work with local governments in Bonneville, Jefferson, Madison, and Teton Counties to compile a geo-referenced structure data set of public and private structures for use in HAZUS modeling to improve the state's seismic vulnerability assessment capabilities.

- Task 2: 2010 National Earthquake Program Manager's Meeting
Cost: \$10,500.00
Description: BHS staff attended the National Earthquake Program Managers Meeting in 2009 to support mitigation planning programs. Funding will also be used to revise and improve Incident Support Annex#2 Earthquake for the Idaho Emergency Operations Plan.

2010 EHRP

Total No. of Projects – 3

Total Award Amount - \$47,234.00

- Task 1: National Earthquake Hazard Reduction Program Soil Classification and Liquefaction Maps
Cost: \$30,000.00
Description: BHS will work with the Idaho Geological Survey to develop soil classification and liquefaction maps for the most populated portion of Teton County, Idaho to map risk from seismic hazard. The map will be released as an IGS Technical Report and will be available for free download at www.idahogeology.org.

- Task 2: 2010 National Earthquake Program Manager's Meeting
Cost: \$5,234.00
Description: BHS staff attended the National Earthquake Program Managers Meeting in 2010 to support mitigation planning programs.

- Task 3: Idaho Science Teachers Seismic Lesson Plan. †
Cost: \$12,000.00
Description: BHS will develop a lesson plan based on our publication, “Putting Down Roots in Earthquake Country: Your Handbook for Earthquakes in Idaho” for use in the classroom by Idaho science teachers.

EHRP funding decreased slightly from 2009 to 2010 due to greater participation by other states in the national program after being designated as having an earthquake hazard. BHS expects that future fluctuations from 2010 award levels will be minimal.

The overall growth of awards for hazard mitigation between 2009 and 2010 can be attributed to a growing capability within the Hazard Mitigation Program. The level of experience and knowledge within the agency is growing at a sustainable rate and will be limited mainly by anticipated match funding for necessary mitigation projects.

† 2009 EHRP Task 1 was completed with a cost underrun, so that 2010 EHRP Task 3 will be accomplished using remaining 2009 EHRP funds.



Hazard Mitigation

Planning and Outreach

Hazard mitigation is defined as a cost-effective and sustained action taken to eliminate or reduce the risks to life and property from natural or man-made hazards and their effects. Viewed broadly, hazard mitigation involves risk reduction and has as its goal to develop and maintain disaster resilience in communities. The process of hazard mitigation planning involves several steps:

1. establishing hazard mitigation goals and objectives;
2. identifying, evaluating, and prioritizing hazards and their appropriate mitigation actions;
3. preparing strategies to implement mitigation actions;
4. documenting the planning process with a hazard mitigation plan.

2010 State Hazard Mitigation Plan. Using a 2008 Pre-Disaster Mitigation (PDM) sub-grant award to the Bureau of Homeland Security, the Hazard Mitigation Program completed the 2010 update to the Idaho State Hazard Mitigation Plan (SHMP). Updates to the SHMP are required by FEMA every three years. The update included

- a review and compilation of all county AHMPs;
- a current risk assessment of Idaho's natural hazards using updated techniques;
- a review and update of mitigation goals and strategies;
- a technical and administrative capabilities assessment of BHS;

- a schedule of mitigation projects and accomplishments for the past three years.

Other highlights of planning and outreach activities conducted in the State of Idaho during the past three years include:

- *Putting Down Roots in Earthquake Country*. Written in collaboration with the Citizen Corps Program and the Idaho Geologic Survey, the booklet has been distributed widely throughout Idaho since 2009.
- *Seismic Advisory Committee*. Formed in 2007, the Idaho Seismic Advisory Committee draws members from a number of agencies and meets regularly to develop and implement solutions to statewide earthquake preparedness and mitigation efforts.
- *Silver Jackets Team*. Meeting at least quarterly, the Idaho Silver Jackets is the state-level implementation of the U.S. Army Corps of Engineer's National Flood Risk Management Program (NFRMP). They serve as a catalyst in developing comprehensive and sustainable solutions to flood hazard issues.
- *Firewise*. In partnership with the State Wildfire Conference, the Idaho State Fire Plan Working Group conducted the 2007 National Fire Plan survey. In response to survey results, Idaho Firewise was formed to coordinate and increase statewide wildland fire education efforts.

The Seismic Advisory Committee, the Silver Jackets Team, and the Idaho State Fire Plan Working Group provided input, analysis, and review of the various draft portions of the SHMP. The Idaho SHMP was submitted to FEMA Region X in early October and was approved by FEMA on November 2, 2010. The process for the 2013 SHMP revision has already begun and an application for FEMA PDM grant funding will occur in December 2011.

Local Plans. In 2010, ten Idaho counties submitted All-Hazard Mitigation Plans (AHMP) that were approved by FEMA, ensuring their continued eligibility for Hazard Mitigation Assistance Grant Programs through 2015.

2010 FEMA-approved Local Plans		
County	All Hazard (Date of FEMA approval)	All Hzd Plan Req. Update (5yrs)
Benewah	6/25/2010	6/25/2015
Bonner	6/3/2010	6/3/2015
Kootenai	5/27/2010	5/27/2015
Minidoka	4/8/2010	4/8/2015
Power	4/8/2010	4/8/2015
Jerome	2/23/2010	2/23/2015
Oneida	2/16/2010	2/16/2015
Bear Lake	1/28/2010	1/28/2015
Bingham	1/28/2010	1/28/2015
Franklin	1/28/2010	1/28/2015

An additional four counties received 2010 PDM sub-grant awards to complete updates to their AHMPs. Three counties received 2010 FMA grant awards to complete an update to the flood portion of their AHMPs.

Sub-grant Awards for Local Plan Updates		
County	FMA Grant	PDM Grant
Elmore		✓
Gem		✓
Payette		✓
Lewis		✓
Bannock	✓	
Clark	✓	
Valley	✓	

Three counties have applied for 2011 PDM sub-grant awards to update their AHMPs.

FY2011 Sub-grant Applications for Local Plan Updates		
County	FMA Grant	PDM Grant
Adams		✓
Canyon		✓
Washington		✓

Coeur d’Alene River LIDAR-HAZUS Analysis. In 2008, Shoshone County received new Flood Insurance Rate Maps (FIRMs) from FEMA. These new digital FIRMS were digital conversions of existing maps and did not include new topographical data. New engineering cross-sections, hydrologic analysis, or hydraulic analysis were also limited.

Superfund remediation in Shoshone County included significant changes to the topography of communities affected by the revised FIRMs. In response to requests from Shoshone County and its communities for assistance in understanding the new changes in the FIRMs, BHS identified a project to acquire, process, and use green LIDAR data for a HAZUS MR4 Level 2 analysis. BHS worked with FEMA Region X Mitigation, the Basin Environmental Improvement Commission, and the Environmental Protection Agency to acquire the LIDAR data.

The project’s hypothesis stated that better topographical data would identify topographical changes that have occurred since the Superfund remediation and that better data would indicate potential areas where outdated topographical data significantly influenced the footprint of the special flood hazard area, commonly referred to as the 100-year flood area. By providing a more accurate bare earth model, the LIDAR data

could be incorporated into the HAZUS MR4 analysis and compared with the control model to identify significant discrepancies that warrant further investigation.

BHS received the data in November 2009. BHS completed a Level 1 HAZUS MR4 analysis and compared the LIDAR data with the control model using data from the revised FIRMs. Differences observed were subtle and not conclusive enough to identify significant errors in the existing flood map. Areas identified with nominal differences in elevation data may warrant additional study to include hydrologic and hydraulic modeling to validate perceived inconsistencies with the existing FIRM.



Hazard Mitigation

Earthquake Program

Ranking sixth in the nation for earthquake activity, Idaho has experienced two of the largest earthquakes in the contiguous United States in the second half of the twentieth century. Idaho ranks earthquakes as one of its three primary hazards. The Hazard Mitigation Program has identified three priorities for the State's earthquake program:

- improving the statewide seismic risk and vulnerability assessment;
- planning for hazard mitigation and for emergency response and recovery at the state and local level;
- reducing future losses through mitigation activities and public education.

Earthquake Structure Data Set Creation. In 2010, using grant awards under FEMA's Earthquake Hazard Reduction Program (EHRP), Hazard Mitigation coordinated with local governments to compile and validate a data set of buildings and facilities located in four counties in eastern Idaho. The inventory of structures included data on construction type and materials, construction and remodel date, occupancy type, existing mitigation, if any, and more. The project also identified critical facilities. The structure data set will be used for HAZUS modeling, a software program providing loss estimation, that will contribute to a comprehensive view of potential risk and losses to citizens and structures in eastern Idaho should a seismic event occur.

Idaho Emergency Operations Plan. Hazard Mitigation staff coordinated with various state and local partners to revise and improve

Incident Support Annex #2 Earthquake for the Idaho Emergency Operations Plan. Issues addressed included planning for mitigation, response, and recovery activities should a significant seismic event occur. Following the revision and using the EQ structure data set, BHS will facilitate a tabletop exercise for local officials that will include earthquake hazard mitigation and recovery activities.

Emergency Management Performance Grant (EMGP). In 2010, Mitigation staff implemented several projects promoting hazard mitigation and the development of disaster-resistant communities and agencies in the State of Idaho using 2009 and 2010 EMPG awards totaling \$260,539.60.

- To expand Idaho's seismic hazard program and develop a comprehensive seismic strategy through coordination with local, state, federal and private-sector partners, a seismic hazard advisory group was organized.
- To increase Idaho's capability to evaluate seismic activity and improve HAZUS modeling for risk and vulnerability analysis, a mapping project produced liquefaction susceptibility maps and NEHRP soil class maps for the Treasure Valley Metro area. The project has been done in partnership with the Idaho Geological Survey
- Data sets were calibrated for the HAZUS model of the Borah Peak or similar quake to support seismic planning activities and the Integrated Emergency Management Course (IEMC) held at Gowen Field in Boise in 2010.
- Two classes were held in Boise and Idaho Falls to provide training in the evaluation of building safety following an earthquake.



Hazard Mitigation

Where We're Headed in 2011

Mitigation Portfolio Database. Beginning in January 2011, the Hazard Mitigation Program will be compiling data on state and local hazard mitigation plans for the construction of a Mitigation Portfolio Database. Our goal is to create a system that enables us to more efficiently track the status of local plan updates, their approval and expiration dates, current grant awards, hazard rankings, and more. The database will allow us to be more effective as we work with local jurisdictions to apply for funding from the Pre-Disaster Mitigation Program well in advance of the expiration dates of their All-Hazard Mitigation Plans. Well-timed PDM awards will ensure that counties and their promulgating local governments experience no gaps in their eligibility for FEMA's Hazard Mitigation Assistance (HMA) Programs.

Phase two of our database will compile data on state and local mitigation projects. Our goal is to streamline BHS' application process and oversight of HMA sub-grant awards to ensure state and local compliance with FEMA requirements. The database will be generally available to subscribers for their planning efforts.

Flood Booklet. The Hazard Mitigation Program is collaborating with the Silver Jackets partner agencies to produce a booklet that will educate and inform Idaho citizens and businesses on flood prevention, response, and recovery.

Earthquake Mitigation. Boise has been chosen as this year's location for the 2011 Annual National Earthquake Program Manager's (NEPM) Meeting. Hosted by the Western States Seismic Policy Council (WSSPC), the event will include WSSPC's annual meeting and the Awards in Excellence Banquet on April 4, followed by the NEPM

meeting on April 5-7. The goal of the yearly event is to bring together federal, regional, and state programs to increase collaboration and understanding of the earthquake program.

Following the success of the publication “Putting Down Roots in Earthquake Country: Your Handbook for Earthquakes in Idaho,” we will be developing a lesson plan for Idaho Science teachers for use in the classroom. It will include visuals, activities, and a teacher’s guide. The lesson Plan will be developed in collaboration with the Citizen Corps Program, Idaho Science Teachers Association, Idaho Geological Survey, and other members of the Idaho Seismic Advisory Committee and will be managed as part of our public education program under Citizen Corps.

BHS will be working with the Idaho Geological Survey to develop National Earthquake Hazard Reduction Program (NEHRP) soil classification and liquefaction maps for the most populated portion of Teton County. Adjacent to Grand Teton National Park and Yellowstone National Park, this area sees thousands of tourists annually and has a seismic risk among the highest in the state. Once finished, maps will be available for free download at www.idahogeology.org.

SHMP Implementation. Pursuant to the strategies and action plans prescribed in the SHMP, the Hazard Mitigation Program will implement a plan maintenance program which includes an annual review of the plan. A review committee will also identify any necessary and substantive changes to be made. The 2010 Mitigation Action Plan (*State Hazard Mitigation Plan*, p. 19) will be initiated and its progress and accomplishments will be reported regularly to BHS leadership.

Hazard Mitigation Assistance (HMA) Grant Programs. The 2011 HMA Grant Programs’ application process began in 2010 and following state and national reviews, HMA sub-grants will be approved and awarded by FEMA in 2011. Applications submitted to HMA Grant Programs include:

Pre-Disaster Mitigation (PDM) 2011 Applications		
Jurisdiction	Project	Project Cost
Valley County	Valley County Bridge Project	\$240,600.00
Project will mitigate flood hazard by replacing Dead Horse Creek Bridge with a new bridge having greater hydraulic capacity.		
City of Kamiah	Pine Street Stormwater / Drainage Mitigation Project	\$77,750.00
Project will eliminate flooding of residences along the east side of Pine Street with the construction of a 2.5' V-ditch, installation of 400' of 30" culvert that will connect to existing drainage at 6 th and Hill Street, and the construction of permanent erosion protection. Project will also repair pavement damaged by previous flooding.		
City of Boise Dept of Public Works	Boise City Hall Seismic Retrofit	\$3,546,725.18
Project will mitigate risk to life and property and help ensure the functionality of Boise City Hall following a seismic event. A structural retrofit will upgrade key structural components to current seismic code requirements.		
Benewah County Emergency Management	St. Maries River Road Elevation Project	\$571,874.56
Project will mitigate flood hazard to residents along a section of the St. Maries River Road in the Kittle Loop area which lies below the Base Flood Elevation. The road will be elevated to reduce the risk of road closures due to flooding. The road elevation will ensure access by first responders and the safety of residents.		
City of Weiser	Water Treatment Facility Flood Protection	\$346,673.00
Project will mitigate the risk of disruption to the supply of potable water and fire suppression water. It will protect the City of Weiser's water treatment plant intake and transfer piping from flood damage by constructing a levee to separate the intake works and the treatment plant and prevent washouts of the main water supply pipe, increasing the size of a culvert under the entrance road to the treatment plant, raising the roadbed, and installing larger drainage pipe.		
City of Mountain Home Public Works	Tiger Alley, S. 14th East and E 12th South Stormwater Corridor Improvement Project	\$587,313.65
Project will mitigate risk to life and property from significant storm events by adding underground piping that will reduce the amount of stormwater flowing along the S14th East Corridor. The piping will collect and convey stormwater to additional stormwater retention storage to be developed as part of the project.		
Adams / Washington Counties	Adams / Washington Counties AHMP Update	\$68,613.00
Project will update the All Hazard Mitigation Plan for Adams and Washington counties.		

Canyon County Emergency Management/ Sherriff's Office	Canyon County AHMP Update	\$54,175.00
Project will update the Canyon County All Hazards Mitigation Plan		
City of Sun Valley Fire Department	Sun Valley Wildfire Mitigation	\$351,996.00
Project will mitigate wildfire hazard by reducing fuel loads in the wildland urban interface along the eastern edge of the City of Sun Valley and creating a defensible space in the WUI.		
Blaine County	Blaine County Courthouse Seismic Retrofit	\$4,077,173.17
Project will mitigate seismic hazard to life, county property, and county records, while ensuring continuity of county services and protection of a historic landmark from damage due to a seismic event. A seismic retrofit will brace the roof and floor joists, anchor the roof and floors to exterior walls, replace roof diaphragm to strengthen framing, repair cracks in exterior masonry, and attach an emergency stairwell to the main building.		
North Latah County Highway District	S. Viola Bridge Replacement	\$274,930.00
Project will mitigate flood hazard by replacing the S. Viola Bridge with a larger structure to increase flow conveyance		
Bannock County Emergency Services	Pocatello Wood Shake Roof Replacements	\$296,164.00
Project will mitigate fire hazard by replacing high-risk wood shake roofs on twenty-five homes in the wildland/urban interface and creating defensible space around ten of those homes.		
City of Inkom	City of Inkom Bridge Replacements	\$182,858.00
Project will replace culvert with a larger bridge that will increase flow conveyance		
Oneida County	Oneida County Seismic Planning	\$34,975.00
Project will update the Oneida County All Hazards Mitigation Plan		
Teton County	Teton Creek Flood Mitigation	\$1,334,001.00
Project will mitigate flood risk to the City of Driggs, properties and buried utilities along the Teton Creek, and the Teton County landfill by stabilizing the stream banks of Teton Creek with the construction of an inset floodplain. It will reduce erosion, eliminate sedimentation and debris, and reestablish riparian vegetation that will provide ecological benefits such as improved water quality and habitat for fish and wildlife.		

Flood Hazard Mitigation (FMA) 2011 Applications		
Jurisdiction	Project	Project Cost
City of Preston	City of Preston Flood Planning	\$44,670.00
Project will update the flood portion of the Franklin County All Hazards Mitigation Plan		
Teton County	Teton Creek Flood Mitigation	\$1,334,001.00
Project will mitigate flood risk to the City of Driggs, properties and buried utilities along the Teton Creek, and the Teton County landfill by stabilizing the stream banks of Teton Creek with the construction of an inset floodplain. It will reduce erosion, eliminate sedimentation and debris, and reestablish riparian vegetation that will provide ecological benefits such as improved water quality and habitat for fish and wildlife.		

Hazard Mitigation Grant Program HMGP-1927 Applications		
Jurisdiction	Project	Project Cost
City of Kamiah	Kamiah Storm Water Master Plan	\$55,800.00
Project will create a planning document that will mitigate drainage and flooding issues in the City of Kamiah and reduce losses as a result of flood hazards.		
City of Weiser	Water Treatment Facility Flood Protection	\$346,673.00
Project will mitigate the risk of disruption to the supply of potable water and fire suppression water. It will protect the City of Weiser's water treatment plant intake and transfer piping from flood damage by constructing a levee to separate the intake works and the treatment plant and prevent washouts of the main water supply pipe, increasing the size of a culvert under the entrance road to the treatment plant, raising the roadbed, and installing larger drainage pipe.		
Firewise	5% Initiative Project – Bring Back the Guberif	\$3,546,725.18
Project will launch an ongoing statewide fire education and prevention campaign designed to educate Idahoans on simple ways to prevent wildfire and decrease losses to valuable property, resources, and life. The campaign will revive and update a fictional character called Guberif (firebug spelled backwards).		
Kamiah Highway District	Miller Road Culvert Replacement	\$265,000.00
Project will replace an existing culvert crossing Miller Road to increase the capacity of the culvert to handle flood flows of Suzie Creek.		
Valley County	Dead Horse Creek Bridge Project	\$240,600.00
Project will replace the Dead Horse Creek Bridge with a new bridge with greater hydraulic capacity to increase flow and reduce future flooding events.		

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