

2011 IDAHO SILVER JACKETS PILOT PROJECT Coeur d'Alene Watershed Shared Vision Planning

*Project Management Plan
21 March 2012*

1. STATE /DISTRICT(S)/ PROJECT LOCATION:

State: Idaho

District: U.S. Army Corps of Engineers (USACE), Seattle District. The Idaho Silver Jackets (ID SJ) Coordinator is based in Boise, Idaho and works for the USACE Walla Walla District.

Project Location: The project location includes the South Fork Coeur d'Alene River and tributaries from Mullan to its confluence with the North Fork Coeur d'Alene River, in Shoshone County, Idaho.

2. INTRODUCTION / BACKGROUND/PROJECT OBJECTIVE(S): *(Include how project addresses state's flood risk management)*

Background

The Coeur d'Alene River Basin is located in the Bitterroot Mountains in northern Idaho, encompassing Shoshone and Kootenai counties. The river basin has an extensive history of flooding, including 13 significant flood events requiring emergency response actions since 1933. There is significant investment that is threatened by flooding, including homes, businesses, and infrastructure. Some levees in the basin were decertified in 2008, leaving developed areas in the Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Map (DFIRM) flood hazard area.

Mining within the Coeur d'Alene Basin began more than 100 years ago. The project area has been significantly impacted by past mining practices and is located within one of the Nation's largest Superfund sites. Until 1968, most tailings were discharged directly into the South Fork Coeur d'Alene River or its tributaries causing widespread distribution of contaminated sediments. Past floods have resulted in expensive emergency response actions and exposure of local citizens to lead and other toxic metals. Superfund clean-up actions are currently underway but many areas continue to be vulnerable to recontamination by contaminated soils that are redistributed during each flood event.

In June 2008, Shoshone County sent a letter of intent to the USACE, Seattle District to sponsor a specifically authorized feasibility study and project to address flood risk management in the South Fork Coeur d'Alene watershed. The Corps has drafted language for a Water Resources Development Act (WRDA) authorization to conduct a General Investigation (GI) for the South Fork Coeur d'Alene watershed for flood risk management, ecosystem restoration, and related purposes. However, WRDA authorization is not required and a study resolution could be provided since Section 6 of

the Flood Control Act of 1936 (PL 74-738) authorizes investigations in the basin. The ID SJ and other agencies agree that a GI would be the most appropriate process to comprehensively investigate flood risk and develop a plan to address the significant problems. However, the possibility of receiving funding and new start authority to begin the GI are unlikely in the near term, given the current budgetary situation at all levels of government.

Citizens in the watershed endorsed a plan of action that leads to certification of existing levees, followed by FEMA accreditation and DFIRMs that demonstrate containment of the base flood. A 2009 memo from state contractor, Terragraphics, explains that very little information is available on the existing levees. Terragraphics estimated, at a planning level, that \$350,000 would be needed to determine what levee modifications are necessary for certification. This excludes the cost of the implementation of the modifications.

In 2009, Shoshone County adopted a FEMA-approved multi-jurisdictional hazard mitigation plan (HMP) which was developed with considerable public input and includes a comprehensive flood hazard analysis. Shoshone County identified flooding as a high probability and having a high consequence. The plan identifies a comprehensive list of mitigation actions to address flooding and other hazards. Specifically, the plan notes that the extent and nature of the Superfund clean-up presents special considerations and that environmental clean-up actions must be protected, along with traditional flood impacted facilities such as homes, businesses, and infrastructure. The Shoshone County HMP includes mitigation actions to protect remediated sites, but also identifies a number of mitigation priorities that are outside remediated areas.

In February 2010, the ID SJ was approached by the Executive Director of the Basin Environmental Improvement Project Commission (BEIPC) to assist with long-term flooding concerns in the upper Coeur d'Alene Basin. The BEIPC is comprised of representatives from the states of Washington and Idaho; Benewah, Shoshone, and Kootenai counties; Coeur d'Alene Tribes; and the Environmental Protection Agency (EPA). The group's purpose is to coordinate Superfund clean-up activities associated with the mining waste contamination. The BEIPC Executive Director requested assistance by the ID SJ with comprehensive review and development of a plan to minimize flood risk to clean-up activities. The ID SJ were approached because of the complex, multi-jurisdictional aspect of the flood risk problems which the EPA believed exceeded its expertise and authority. (EPA is the lead federal agency implementing the clean-up.)

The ID SJ, as a team and individual member agencies, have attended BEIPC meetings, and have discussed flood risk issues in the watershed with local governments, the BEIPC, federal and state agencies, Idaho Governor's office, and Congressional and local elected officials. In March 2011, three federal agencies (EPA, FEMA, and USACE) met with the state agencies at the Idaho Governor's request to discuss a comprehensive, coordinated strategy among the federal agencies to address local community concerns associated with environmental remediation and flood risk management. In a June 2011 meeting of the ID SJ agency leaders, there was

agreement that an appropriate role for the ID SJ was to help the community identify a path forward. The ID SJ submitted a Pilot Project proposal to work with the community to develop a path forward. Funding was received in September 2011 to execute the Pilot Project.

Objectives

- Examine and understand flood risk in the South Fork Coeur d'Alene watershed within Shoshone County, broadening understanding beyond Superfund remediated sites.
- Develop a process and framework so that the community can identify a sustainable strategy to identify and pursue flood risk mitigation efforts.
- Conduct project in a collaborative manner.
- Communicate flood risk and flood risk mitigation strategies to the community.
- Identify actions/strategies that a community can pursue or implement with available resources and programs to reduce flood risk in both the short and long term.

This project management plan (PMP) describes a process, tasks, roles and responsibilities, and a schedule to meet these objectives.

3. WORK TO BE PERFORMED / TASKS / DELIVERABLES:

1. Flood Risk Management Working Group (Working Group): Facilitate the formation of a watershed focused interdisciplinary working group at the local level for the purpose of identifying flood risk mitigation actions and priorities, working to implement solutions, and coordinating flood risk mitigation actions by others. This group would largely focus on coordinating and implementing mitigation activities identified in the Shoshone County multi-jurisdictional HMP as well as floodplain administration.

- a) Work with local governments to identify local representatives to form and participate on the Working Group. At a minimum, membership would include local floodplain managers and emergency response managers, and could include state and federal agencies with technical expertise in flood risk mitigation, floodplain management, and the unique conditions that exist in the watershed.
- b) Assist the Working Group with development of a charter that identifies group membership, operational framework, group vision, and objectives.

2. Flood Risk Mitigation Action Plan: Develop a table of watershed flood risk mitigation actions and priorities to promote a shared watershed vision and create a clear path forward for implementation of identified mitigation actions. The action plan would allow the watershed community to integrate the significant available information and completed plans to develop a unified community vision for managing the floodplain and flood hazard risk. The community can use this to help prioritize strategies, identify data gaps that need to be addressed prior to implementation of actions, and identify resources for implementation, including agency programs and funding sources, in the near and long term. Attachment A provides a template for the action plan table and

identifies the categories of information that may be compiled or developed. Action plan categories may be adjusted at the direction of the Working Group and ID SJ team.

The ID SJ team will compile the Flood Risk Mitigation Action Plan with assistance from the Flood Risk Management Working Group and input from other community and agency representatives with expertise on local flood risk issues. The ID SJ team will provide technical assistance and the collaborative framework to develop the Flood Risk Mitigation Action Plan. Review and feedback on action plan development will occur through electronic mail and five half-day meetings to occur in Kellogg, Idaho or a nearby location with the Working Group and identified stakeholders.

- a) The ID SJ team will develop a Flood Risk Mitigation Action Plan that identifies flood risk mitigation actions and strategies contained in current county and community plans, including:
 - 1) Shoshone County Multi-jurisdictional HMP
 - 2) County and community comprehensive plans and ordinances
 - 3) Shoshone County Emergency Flood Response Plan
 - 4) Other studies or plans identified by the Working Group and SJ team.Flood risk mitigation actions will be documented in a Flood Risk Mitigation Action Plan table (see attachment A – columns A through E).
- b) With feedback from the Flood Risk Management Working Group, conduct an assessment of these actions, including the following steps:
 - 1) Identify mitigation action status i.e., completed, in process, etc. (Action Plan table – column F).
 - 2) Assess current flood risk and potential flood risk reduction with implementation of flood risk mitigation strategy (Action Plan table – columns G and H). This will entail a qualitative assessment using available quantitative data.
 - 3) Compile and inventory available hydraulic and analytical studies and other data that will inform an assessment of flood risk mitigation actions and priorities. Develop a data inventory table (appendix to Flood Risk Mitigation Action Plan).
 - 4) Match available information identified in the data inventory described above to the appropriate flood risk mitigation strategy and identify data gaps (Action Plan table – columns I and J).
 - 5) Identify programs/opportunities/resources required to implement the identified actions (Action Plan table – columns K and L). Cost estimates will be ball park estimates based on existing studies or professional judgment. Existing cost estimate templates and scopes of work will be used to estimate levee certification and floodplain mapping costs and requirements.
 - 6) Develop criteria to rank and prioritize remaining actions in a manner similar to that completed for the Shoshone County HMP (used STAPLEE UNWEIGHTED scoring) (Action Plan table – columns O).
 - 7) Determine a general schedule to implement prioritized actions and identify lead agency for implementation (Action Plan table – columns M and N).

- 8) Select one to three projects to implement within a 3-5 year timeframe, e.g., NOAA Weather Radio Tower transmitter, stormwater management, grant preparation, USGS WebCam, etc. (If Pilot Project funds remain after coordination of the activities specified in this PMP, some funds could be used to assist with implementation of one project identified in this process that is consistent with USACE program funding authorities.)

3. Community Outreach Activities – Assist the Working Group with community outreach activities to communicate the magnitude of flood risk in the watershed, opportunities to reduce flood risk, and state and federal programs associated with flood risk and mitigation. These outreach activities would be coordinated with the development of the Flood Risk Mitigation Action Plan described above, and may include, as funding and resources allow:

- Facilitate annual plan maintenance of the *Shoshone County Multi-Jurisdictional HMP*.
- Conduct levee briefings describing the USACE, FEMA, and local communities' roles and responsibilities and available programs.
- Conduct information session about the National Flood Insurance Program and Risk MAP.
- Describe additional agency programs for implementing flood risk mitigation actions.

A compilation of agency programs and resources will be an appendix to the Flood Risk Mitigation Action Plan.

4. Facilitate Meetings - Facilitate five Working Group meetings in Kellogg, Idaho or nearby to accomplish tasks 1-3 above. Working Group meeting objectives and tasks are summarized in Section 5. Additional meetings may be conducted via video-conference, web meeting, or conference call as needed and if funding allows.

4. PROJECT DELIVERY TEAM (PDT) AND STAKEHOLDERS - ROLES AND RESPONSIBILITIES:

Project Delivery Team - The PDT will be comprised of the ID SJ team. The ID SJ core team is comprised of federal and state agencies. The ID SJ developed and submitted the proposal for the Pilot Project. Current participating core team agencies include Idaho Bureau of Homeland Security (IBHS), Idaho Department of Water Resources (IDWR), Idaho Division of Environmental Quality (IDEQ), FEMA, National Weather Service (NWS), Natural Resources Conservation Service (NRCS), U.S. Geological Survey (USGS), and the USACE. The ID SJ will coordinate the compilation of the Flood Risk Mitigation Action Plan and provide a facilitative process to complete the tasks described in this PMP.

All ID SJ member agencies will provide assistance in compiling information to input into the Flood Risk Mitigation Action Plan table described in Section 3, item 2. The ID SJ team will conduct some analysis and evaluation in order to complete the Action Plan table categories using available information. ID SJ member agencies will provide

technical expertise and staff support for outreach activities consistent with agency missions and authorities. Member agencies will attend Working Group meetings as funding allows.

Specific roles and responsibilities of individual ID SJ member agencies for the Pilot Project are described below:

- USACE will coordinate Pilot Project activities, maintain the Action Plan table until completed, and coordinate overall ID SJ team involvement and communication with the watershed community representatives. The Pilot Project will use resources in the USACE Seattle District and Walla Walla District as described below.
 - USACE Seattle District – Planning, emergency response, hydrology and hydraulic engineering, and geotechnical engineering expertise.
 - USACE Walla Walla District – Project management, coordination, and meeting facilitation. Regulatory permitting in Idaho is under the jurisdiction of the Walla Walla District.
- FEMA will provide technical and staff support for identified Pilot Project and outreach activities including National Flood Insurance Program, Risk MAP, grants, and other funding opportunities, contingent on funding and staff availability.
- NWS will function as the ID SJ liaison with the BEIPC and associated subgroups. NWS can also provide river and weather forecasts, flood watches and warnings, as well as flood and hydrologic information.
- USGS will provide technical support and information about available data and resources. The agency maintains and operates multiple real-time stream gages within the basin.
- IBHS will provide input and expertise about HMP development and implementation, flood risk grant opportunities, and emergency response.
- IDEQ is the state lead for Superfund clean-up in the Pilot Project study area and the liaison between the ID SJ team and the EPA.
- IDWR will provide input and staff support for outreach activities related to the National Flood Insurance Program and floodplain management as the state floodplain coordinator. Limited GIS support may be provided.

Flood Risk Management Working Group: Formation of a Working Group is described in Section 3, item 1. The Working Group will review the work of the ID SJ team and provide feedback and information as needed. The Working Group will assist in identifying, compiling, and obtaining information requested by ID SJ to populate the Action Plan table. The Working Group will identify mitigation actions and short- and long-term priorities. The group will be responsible for implementation of actions identified. Individual ID SJ member agencies may assist the Working Group to implement priority actions through individual agency programs.

Working Group members identified by the community and ID SJ team include:

- Shoshone County, Emergency Manager – John Specht

- Shoshone County, Floodplain Administrator – Dan Martinsen
- Shoshone County, Public Works Director – John Thomas
- Shoshone County, Commissioners – Vince Rinaldi, Jon Cantamessa, Larry Yergler
- Panhandle Health District, Institutional Program Controls Manager - Jerry Cobb
- BEIPC, Executive Director – Terry Harwood
- Floodplain administrators for the seven incorporated communities of Kellogg, Osburn, Pinehurst, Smelterville, Mullan, Wallace, and Wardner.
- EPA – Anne McCauley, Project Manager

Stakeholders: Stakeholders are defined as agencies or organizations that may impact or be affected by flood risk or have technical expertise or information pertaining to floodplain management. Watershed stakeholders identified by the local community include, but are not limited to

- Mayors for the seven incorporated communities of Kellogg, Osburn, Pinehurst, Smelterville, Mullan, Wallace, and Wardner.
- Benewah County Commissioners and staff
- Kootenai County Commissioners and staff
- Coeur d'Alene Tribe
- Idaho Department of Fish and Game
- Kootenai-Shoshone County Soil and Water Conservation District
- BEIPC (and sub committees including Citizen Coordinating Council)
- Bureau of Land Management
- EPA
- U.S. Fish and Wildlife Service
- U.S. Forest Service

The PDT will coordinate development of the Flood Risk Mitigation Action Plan with stakeholders as directed by the Flood Risk Management Working Group. Outreach activities will also include stakeholders. Additional stakeholders may be identified by the Working Group.

5. SCHEDULE / MILESTONES:

The Pilot Project must be completed by March 31, 2013. Pilot Project milestones are tied to completion of key information in the Flood Risk Mitigation Action Plan and presentation to the Working Group at five scheduled meetings. These milestones are described below

Meeting 1 - March 14, 2012

- Review Pilot Project PMP to understand objectives, scope, schedule, and deliverables.
- Review roles and responsibilities.
- Agree on communication protocol.
- Initial meeting of Flood Risk Management Working Group members.
- Review draft Flood Risk Mitigation Action Plan table.

- Review mitigation actions identified in existing plans and brainstorm new.
- Discuss available information, data, and analyses.

Meeting 2 - Week of June 25, 2012

- Discuss/ review draft Working Group charter describing group objectives, roles and responsibilities, operational framework, etc.
- Review and develop Flood Risk Mitigation Action Plan.
 - Review status of flood risk mitigation actions (columns A through F).
 - Review flood risk assessment (columns G and H).
 - Complete data inventory.
 - Review data gaps evaluation (Columns I and J).

Meeting 3 – Week of August 27, 2012

- Initial prioritization of flood risk mitigation actions.
- Screen actions based on prioritization.
- Outreach - discussion of agency flood risk mitigation or other related programs.

Meeting 4 – Week of November 5, 2012

- Refine screening and prioritization of actions.
- Identify agency leads for implementation.
- Outreach – discussion of agency flood risk mitigation or other related programs.

Meeting 5 – Week of January 28, 2012

- Finalize Flood Risk Mitigation Action Plan
- Discuss implementation actions.

6. CRITICAL ASSUMPTIONS / CONSTRAINTS:

The study scope, costs, and schedule described in this PMP are based on the following assumptions and constraints:

- It is assumed that all agencies and stakeholders currently have funding or resources available to conduct the tasks described here.
- All identified agencies will provide information and comment in a timely manner as scheduled.
- To ensure proper collaboration and coordination, the ID SJ Coordinator will be the central point of communication and coordination for the project. Communications will be coordinated through the ID SJ coordinator.
- The project will rely on existing, available information.
- Project scope assumes five meetings will take place in the Kellogg area. Additional meetings will be conducted via conference call, web meeting or video teleconference.
- A constraint for this project will be the availability of staff resources.
- Activities and deliverables will be coordinated with FEMA to ensure consistency with NFIP policy.

- Shoshone County and local communities will be responsible for taking the lead in implementing the Flood Risk Mitigation Action Plan described in this PMP and the Shoshone County HMP.

7. COMMUNICATIONS STRATEGY / INTERNAL AND EXTERNAL / KEY

MESSAGES AND TALKING POINTS: *(Include who will use the products of the pilot project work and how those products will be transferred)*

Internal Communications

All reports and documents will be produced using Microsoft (MS) Office software including, MS Word and MS Excel and, when transmitted electronically, will be in either *.docx, *.xlsx or *.pdf format.

Effective communications are key to the execution of this study. Communication among team members will consist of both formal team meetings and informal day-to-day interaction. E-mail is encouraged as the primary means of written communication among all team members.

A subcommittee comprised of an individual from each ID SJ member agency will serve as the primary point of contact for that agency. The ID SJ Coordinator will serve as the central point of communication for day-to-day activities and coordination between the ID SJ team, Working Group, and stakeholders. ID SJ team members will copy the ID SJ Coordinator in all communications. The ID SJ subcommittee will meet as needed to discuss study schedule, work requirements, and findings. Meetings will utilize conference calls and web meetings to help reduce travel expenses.

A SharePoint extranet site will be established to post and share documents between the ID SJ team and Working Group. The Pilot Project schedule will be posted on the SharePoint site.

The ID SJ Coordinator will maintain an archive of documentation (emails, phone logs, etc.) with project information. All significant meetings, e-mails, and phone calls will be documented with memos and/or shared by e-mail with the PDT.

External Communications

The ID SJ will engage the Working Group and stakeholders in a collaborative process to review key products and discuss distribution of information. The ID SJ Coordinator may distribute information to external partners as needed, after consulting with the Working Group.

State law requires public advertisement and open meetings when attended by County Commissioners. Shoshone County will advertise Working Group meetings described in Section 5 as required.

The Pilot Project will result in the development of a Flood Risk Mitigation Action Plan with several appendices including an assessment and inventory of available studies and a summary of agency programs and resources. All documents and data will be

provided to the Working Group leads. Further, the ID SJ will conduct a number of Outreach activities and meetings before, during, or after the Working Group meetings.

8. PROJECT COST ESTIMATES: *(Include other agency contribution/investments that will be leveraged, include name of agency and amount of work or data)*

USACE Pilot Project funding: \$100,000

Seattle District Total: \$ 91,000
 Labor – \$ 86,000
 Travel – \$ 5,000

Walla Walla District Total: \$ 19,000
 Labor - \$ 16,000
 Travel - \$ 3,000

Agencies providing in-kind services are listed here:

- IDBHS - Estimated personnel and travel costs \$7,800
- IDEQ - Estimated personnel and travel costs ~ \$8,000
- IDWR - Estimated personnel and travel costs ~ \$8,000
- FEMA - Estimated personnel and travel costs: \$18,538.88
- NWS – Estimated personnel and travel costs: ~ \$8,000
- USGS - Estimated personnel and travel costs ~ \$10,000

9. REPORTING REQUIREMENTS TO IWR: Quarterly reports on Pilot Project progress will be provided to the Silver Jackets Program Manager. This will be submitted as an addendum to the quarterly ID SJ team reports. Quarterly progress report will summarize work completed for that quarter, funds expended, and any changes in risk that affect project schedule or scope.

10. CHANGE MANAGEMENT: *(How will risk be handled? Changes in schedules or study scope?)*

This PMP documents scope, schedule, and budget for the pilot project. Changes will be coordinated through the ID SJ team and Flood Risk Management Working Group. The PMP will be revised to identify any revisions to scope, schedule, and budget.

The ID SJ Coordinator will monitor physical and fiscal progress of all work. PDT members are responsible for performing to budget and schedule. Any potential changes should be raised by the PDT as soon as possible in order to evaluate the impacts to the entire pilot project.

Formal evaluation for changed conditions will occur quarterly (every three months) by the ID SJ team. At that time the ID SJ team will review the scope and schedule to determine if modifications are required. Modifications will occur with the mutual consent of ID SJ team, agreement by the Working Group, documented in writing, and forwarded to the USACE IWR for approval.

11. VERIFICATION / APPROVALS:

The PMP was developed, reviewed and approved by ID SJ subcommittee comprised of representatives from IBHS, IDWR, IDEQ, NWS, FEMA and USGS.

The PMP was reviewed and feedback provided by Shoshone County representatives, including the county floodplain manager, county emergency manager, Shoshone County Commissioners, and Panhandle Central Health District.

ATTACHMENT A
Flood Risk Mitigation Action Plan Categories and Example Table

ACTION PLAN CATEGORIES

<i>Column</i>	<i>Table Category</i>
A	Project No. - References the project number in the Shoshone County Multi-Jurisdictional Hazards Mitigation Plan (August 24, 2009).
B	Flood Risk Mitigation Action/Strategy – Describe the flood risk mitigation action or strategy; this could include policy or action that will reduce loss potential, enhance resources and capabilities, or change risk characteristics.
C	Action/Strategy Source: Identify original source of the proposed action or strategy, i.e. County HMP, community comprehensive plan, etc.
D	Location – References the three letter city codes contained in the Shoshone County Multi-Jurisdictional Hazards Mitigation Plan (August 24, 2009). KEL = Kellogg; MUL = Mullan; OSB = Osburn; PIN = Pinehurst; SME = Smelterville; WAL = Wallace; WAR = Wardner; and SHO = All of Shoshone County
E	Current Priority (STAPLEE score) – References priority identified in the Shoshone County Multi-Jurisdictional Hazards Mitigation Plan (August 24, 2009) as a STAPLEE score.
F	Implementation Status – What is the current status - completed, in process, not scheduled?
G	Current Flood Risk – Describe the current flood risk (Develop definition of these categories based on probability and consequence of flood event – low, moderate, high, significant.)
H	Relative Risk Reduction – Describe estimated level of risk reduction from implementation.
I	Existing Data/Analyses/Studies – Develop data inventory. Use data inventory to identify existing information that could contribute to implementation of mitigation action.
J	Data Gaps – Describe additional studies or data required to implement.
K	Estimated Funding/Resources Required – Estimate the funding or other resources required to implement (Provide dollar estimate or range or staff resources required.)
L	Resource Opportunities – Identify potential programs, partnerships, or funding sources required to implement.
M	Lead Responsibility – Identify the Working Group agency, organization, or individual that will take the lead in coordinating implementation of the action/strategy.
N	Timeline – What is the estimated amount of time to implement the action or strategy? Or when is it scheduled for implementation? Note: May be described as short term or long term or within one year, within three years, etc.
O	New Priority – Identify the priority relative to other actions. Use STAPLEE criteria (similar to that used to establish priorities in the Shoshone County HMP) to prioritize.
P	Comments – Provide any additional information.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Project No.	Flood Risk Mitigation Action/ Strategy	Action/ Strategy Source	Location	Current Priority (STAPLEE Score)	Implementation Status	Flood Risk	Relative Risk Reduction	Existing Data/ Analyses/ Studies/	Data Gaps	Estimated Funding/Resources Required	Resource Opportunities	Lead Responsibility	Timeline	New Priority (Updated STAPLEE Score)	Comments/Notes
1023	Design and build adequate storm drainage system for Meyer Gulch & McPherson Gulch.	HMP	KEL	91	In process	Moderate	Increases level of protection from 3 percent to 1 percent event for 50 homes	Hydraulic model completed from X to X (2008 EPA). - Design and construction specs completed (2011) (EPA)	n/a	\$1 M		EPA in coordination with BEIPC	Construction Summer 2012		
2045	Design, construct and obtain certification of a South Fork Coeur d'Alene River Levee System.	HMP	SHO	39	Not scheduled	Significant	Removes 500 homes from 1 percent floodplain, valued at \$50 million	- LIDAR acquired 2009 (IBHS) - HAZUS model completed (IBHS, 2010) - Flood frequencies (USGS 2008) - Terragratics assessment (2005)	- Cross sections - GIS base maps and overlays - Build hydraulic model - Inventory of levee location and condition	\$5 M	- Incremental portions could be addressed through FEMA Grant, Fed-non-Fed cost share required - Corps General Investigation Study	Shoshone County	Contingent on funding, minimum of 3 years		Corps requires Congressional authorization and appropriations before can conduct study. Feasibility study is funded 50 percent Federal- 50 percent non-Federal
3014	Structural flood-proofing of private structures in highest risk areas.	HMP	SHO	57	Completed	Moderate	Reduced potential damage from a flood event from a 1 percent event by \$275k	Typical specs for flood proofing		\$500K	FEMA Grant	Local communities	n/a		
2012	Establish a site location for a NOAA Weather Radio Tower Repeater in collaboration between Shoshone County and the National Weather Service for participation in the Storm Ready Program.	HMP	SHO		Not scheduled			Easement acquired	None	\$25k	FEMA Grant	Shoshone County Emergency Mgr	Complete in 2012		
4012	Create inventory of levee locations and conditions.	Flood Risk Mgt Working Group	SHO	n/a	Not scheduled	Significant	No change - would provide incremental implementation of action #2	- General levee inventory available - Corps Flood fight reports (1970s)	GPS data	\$10k	- Corps Planning Assistance to States Study - FEMA grant - IDWR GIS through Risk MAP funding	Shoshone County Floodplain Mgr	3 months		

NOTE: Content is for illustrative purposes only and does not reflect actual data.