



United States Department of Agriculture

Office of the Secretary
Washington, D.C. 20250

JUN 13 2012

The Honorable Jack Reed
Chairman
Subcommittee on Interior, Environment,
and Related Agencies
Committee on Appropriations
United States Senate
131 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed is the U.S. Department of Agriculture's Forest Service report on the status of implementation of the Integrated Restoration Resource (IRR) Pilot Program in Forest Service Regions 1, 3, and 4, as directed by the Joint Statement of Managers accompanying the Consolidated Appropriations Act, 2012 (P.L. 112-74).

The Consolidated Appropriations Act allows the Forest Service to conduct an IRR pilot, and the Statement of Managers requested that a plan and guidance be developed. The Joint Statement requested that the plan and guidance ensure program transparency, monitoring, fair allocation of funding, a consistent approach across the three regions, and that restoration be the primary goal of any projects funded through the pilot. The plan also was to include traditional measures, such as timber targets and acres treated, while also including new measures such as watershed condition improvement in House Conference Report 112-331.

In compliance with section 435 of Public Law 111-88, after 45 days this report will be posted to the Forest Service Web site at <http://www.fs.fed.us/aboutus/budget/congressional-directives.shtml>. Also, for your information, an additional document and maps are enclosed. The document is an early example of a watershed action plan and is entitled "The FY 2011 Watershed Restoration Action Plan: Cascade Ranger District, Boise National Forest." The development of watershed restoration action plans is described in the Watershed Condition Framework publication (FS-977). The maps are of USDA's Forest Service Regions 1, 3, and 4, and are accessible via <http://apps.fs.usda.gov/WCFmapviewer/>.

A similar letter and a copy of the report, additional document, and maps are being sent to Congressman Michael K. Simpson, Congressman James Moran, and Senator Lisa Murkowski.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Vilsack", written over a circular stamp or seal.

Thomas J. Vilsack
Secretary

Enclosures



United States Department of Agriculture

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Washington, D.C. 20250

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The Honorable Lisa Murkowski
Ranking Member
Subcommittee on Interior, Environment,
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Committee on Appropriations
United States Senate
125 Hart Senate Office Building
Washington, D.C. 20510

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The Honorable Michael K. Simpson
Chairman
Subcommittee on Interior, Environment,
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Committee on Appropriations
U.S. House of Representatives
B-308 Rayburn House Office Building
Washington, D.C. 20515

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The Honorable James P. Moran
Ranking Member
Subcommittee on Interior, Environment,
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Committee on Appropriations
U.S. House and Representatives
1016 Longworth House Office Building
Washington, D.C. 20515

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**U.S. Department of Agriculture's Forest Service
Integrated Resource Restoration Pilot Program Accountability
(Regions 1, 3, and 4)**

Fiscal Year 2012 Implementation Overview

The fiscal year (FY) 2012 Consolidated Appropriations Act funded the implementation of a Forest Service Integrated Resource Restoration (IRR) pilot program in Regions 1, 3, and 4. The Consolidated Appropriations Act provided funding up to \$146,350,464 for the program in FY 2012. Program implementation guidance was made available to the three regions on February 6, 2012, including targets to ensure performance and accountability goals are met by the pilot regions. The direction includes an emphasis on program integration whose outcomes will be measured using traditional targets such as timber targets, miles of road decommissioned, and miles of stream habitat restored, while also including new measures related to the watershed condition framework (see tables below). A report of the IRR Pilot Authority summarizing the first year's accomplishments from Regions 1, 3, and 4 will be completed no later than November 30, 2012.

How Funding and Targets Were Allocated in FY 2012

The Forest Service's Headquarters provided program direction to the pilot regions to ensure funding allocations are consistent across the regions. Overall IRR funding limits were set by the FY 2012 Consolidated Appropriations Act. Funding for each region is based upon capability, past performance, and adjusted according to national targets. The table below represents the FY 2012 IRR allocations by region (dollars in thousands).

Funding Levels	Region 1	Region 3	Region 4	Total ¹
FY 2012	\$59,099	\$38,514	\$41,615	\$139,228

Our primary outcome-based accomplishment measures associated with IRR work are the *number of watersheds moved to an improved conditions class* and the *total acres treated annually to sustain or restore watershed function and resilience*. We will also track three traditional output-based measures to gauge our progress: *miles of roads decommissioned*; *miles of stream habitat restored or enhanced*; and *volume of timber sold*. The five accomplishment measures assigned to IRR are outcome or output based.

¹ Funding is less than upper limit to enable appropriate distribution of overall funding to non-participating IRR region

The table below summarizes the expected national outcomes and outputs under the pilot IRR strategy.

IRR Performance Measures FY 2012	Region 1	Region 3	Region 4	Total
Number of watersheds moved to an improved condition class	2	0 ²	1	3
Acres treated annually to sustain or restore watershed function and resilience	240,700	283,100	225,000	748,800
Volume of timber sold (mmbf)	282	120	116	518
Miles of roads decommissioned	345	115	190	650
Miles of stream habitat restored or enhanced	300	130	220	650

Watershed Condition Framework and Priority Watersheds

A critical component of the successful implementation of IRR is the Watershed Condition Framework. This framework provides foundation and guidance for consistent identification of factors limiting a watershed’s condition and determination of the overall condition class of a watershed, identifies priority watersheds on which to focus restoration efforts, and identifies the essential suite of projects to improve a watershed’s condition. The three pilot regions have assessed the condition class of all of their 5,926 watersheds containing significant portions of National Forest System (NFS) lands. Among them, 78 watersheds were selected as priorities for restoration activities in the next 3 to 5 years.

Number of Watersheds by Condition Class		R1	R3	R4	Pilot Total	% of Total
	Condition Class 1 (Good)	1,078	559	1,133	2,770	47%
	Condition Class 2 (Fair)	826	890	1,153	2,869	48%
	Condition Class 3 (Poor)	48	97	142	287	5%
	Total:	1,952	1,546	2,428	5,926	100%
	Number of Priority Watersheds	25	15	38	78	

See the appendix for a set of maps showing the distribution of the watershed condition classes within the pilot regions. Also included with this report is a sample watershed action plan, illustrating the type of information in each action plan and the activities scheduled for each priority watershed. All of this information, including the specific watershed restoration action plans for each of the priority watersheds in the pilot regions, is available to the public online.

Link to WCF maps - <http://apps.fs.usda.gov/WCFmapviewer/>

Link to WCF Web site - <http://www.fs.fed.us/publications/watershed/>

² This performance measure is based on the completion of all watershed improvement projects in a specific watershed, which on average is a 2-4 year span. Due to the significant impact of the FY 2011 large scale wildfires on work priorities in R3, progress on improvement projects in priority watersheds was negatively affected.

Ongoing Evaluations and Monitoring

To evaluate the effectiveness of the Forest Service's IRR Pilot Authority, Regions 1, 3, and 4 will submit accomplishment reports. Information will be compiled into a national report illustrating how the pilot authority addressed operational efficiencies and met desired outcomes. The regions will submit the following:

- Three to five case studies from each region showcasing accomplishments and successes implementing the IRR authority.
- Descriptions of outcomes associated with activities to improve watershed condition within the context of the Watershed Condition Framework.
- Examples of combining focus and funding with Collaborative Forest Landscape Restoration projects to advance on-the-ground restoration through community-based collaboration.
- Descriptions of how consolidation of multiple budget line items affected programs/activities/project selection.
- Advantages and disadvantages of a consolidated budget line item (the symbol for this budget line item is NFRR).
- Recommendations on how IRR authority can be improved.
- Communication tools and/or Web sites highlighting to the public aspects of IRR pilot implementation.

Monthly video teleconferences are scheduled to identify emerging issues, discuss unforeseen consequences, and maintain consistency, as appropriate, among the three regions.



USDA Forest Service Watershed Condition Framework

FY2011 TRANSITION WATERSHED RESTORATION ACTION PLAN

**STOLLE CREEK – SOUTH FORK SALMON RIVER PRIORITY WATERSHED
Boise National Forest**





**USDA Forest Service Watershed Condition Framework
FY2011 TRANSITION WATERSHED RESTORATION ACTION PLAN
STOLLE CREEK – SOUTH FORK SALMON RIVER WATERSHED**

1. Summary

- a. **Watershed Name and HUC:** Stolle Creek – SFSR (170602080403)
- b. **General Location:** South Fork Salmon River (SFSR) Subbasin (25 mi East of Cascade, Idaho)
- c. **Total Watershed Area:** 20,202 acres; **NFS area within watershed:** 100%.
- d. **Watershed Characterization:**
 - **General Physiography:** The Stolle Creek-South Fork Salmon River subwatershed 6th field hydrologic unit code (170602080403) is approximately 20,202 acres. The subwatershed area is composed of 100% National Forest System lands within Valley County located approximately 25 miles East of Cascade, Idaho. The Stolle Creek-South Fork Salmon River subwatershed is nested within the Upper South Fork Salmon River - 5th field hydrologic unit (1706020811) which is approximately 58,614 acres. This 5th field hydrologic unit is nested within the South Fork Salmon River subbasin - 4th field hydrologic unit code (17060208) which is approximately 840,053 acres.

Elevations within the subwatershed range from approximately 5,120 feet near the confluence of the SFSR and Trail/Curtis Creeks (SFSR campground) to 8,636 ft just south of the headwaters of Lodgepole Creek.

Elevations within the subwatershed range from approximately 8,636 ft just south of the headwaters of Lodgepole Creek to 5,120 feet near the confluence of the SFSR and Trail/Curtis Creeks. The hydrologic regime in this subwatershed is best characterized as snowpack dominated. Stream discharge is dominated by late spring runoff. Typically, peak flows begin in late-April and continue through May. The spring runoff period is followed by dry summer and early fall conditions that greatly reduce streamflow. Streams not supported by groundwater sources are often intermittent and become dry in the late summer. There is a chance for an occasional thunderstorm that can produce short duration – high intensity precipitation and resulting flashy streamflows.

Streams in the project area are predominately A and B channel types with the exception that the mainstem of the South Fork Salmon River is primarily a C channel type . Rosgen (1996) classifies natural rivers by their characteristics, including entrenchment ratio, width/depth ratio, sinuosity, slope, and channel material. A-type channels are typically entrenched, have low width to depth ratios, low sinuosity, and moderate to high stream gradients. B-type channels are typically moderately entrenched, have moderate width to depth ratios, moderate sinuosity, and low to moderate stream gradients. C channel types are typically slightly entrenched, have moderate width to depth ratios, high sinuosity, and low stream gradients (Rosgen, 1996, p. 5-6).

The project area is contained in the Northern Rocky Mountain Geomorphic Province. The subbasin is situated on the Atlanta Lobe, the southern portion of the Cretaceous granite formation commonly known as the Idaho Batholith. Rock types found within the batholith range from quartz gabbro to granite. The most common rocks are granodiorite and quartz monzonite. These granitic parent materials weather to form gravelly, coarse to moderately coarse textures and shallow to moderately deep soils. The majority of the soil units have low to moderate cohesion, medium-grained soils that are moderately to highly erodible, especially when disturbed.

Water yielded from these soil units is rapid to slow and occurs at moderately deep (> 40 inches) subsurface flow. Overland flow is uncommon except in response to high intensity rainfall from thunderstorms or rain-on-snow-events. Hazards of debris slides cut slope stability and fill slope stability range from low to high in all of these soils. The geology and soils, topography, and hydrology of both project areas combine to produce moderate to high sedimentation rates.

The project area is dominated by variable mountain weather patterns. Air movement patterns are primarily westerly. The annual weather cycle consists of cold winters and warm summers. In winter, the prevailing winds are from the west and northwest. These winds bring moderate winter temperatures and moisture from the Pacific Ocean. December and January are typically the coldest and wettest months of the year. Annual precipitation ranges from approximately 25-50 inches per year with approximately two-thirds of the precipitation occurring as snow during the winter months. Occasionally, the westerly winds give way to Arctic air masses that bring cold continental air temperatures directly from the north. During the summer, the westerly winds of winter subside and continental climatic conditions prevail. July and August are typically the warmest and driest months of the year.

Transitions in the seasons are marked by rapid weather changes. During the winter and early spring months, relatively warm and humid air masses can enter causing rapid snowmelt. When rapid snowmelt combines with rainfall, rain-on-snow events can occur. These events create saturated soils and high runoff that can trigger landslides.

- **Land Use:** Stolle Creek – SRSR is located within Management Area 19 – Warm Lake. This area is managed by the Cascade Ranger District. The Management Prescription Category (MPC) identified in the 2010 Forest Plan is 3.2 for the entire watershed. The MPC 3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources has an overall objective to actively restore or maintain conditions for water quality beneficial uses including 303(d) impaired water bodies/TMDLs, TEPCS fish, wildlife, and botanical species through a combination of management activities and natural processes. The Stolle Creek-SFSR Watershed was identified in the Watershed and Aquatic Recovery Strategy as an Active-High restoration priority during forest plan revision in 2003.

The watershed includes the Stolle Meadow area and is a popular summer and fall recreational destination. Within a five minute drive are Warm Lake, two commercial

lodges, two organized youth camps, one outfitter and guide, 62 recreation residences, six developed campgrounds, and the SFSR Salmon Sport Fishery. Immediately downstream of the watershed, a hatchery program operates to provide a sport fishery for Chinook salmon. A sport fishery (2-3 week long) has occurred annually from 1999 to present and is significant to Valley County's Economy. A 2003 economic study on fishing showed the Chinook salmon sport fishery produced \$4.6 million to the county which was 21% of the entire revenue to the county from fishing. Vital to the sport fishery is to maintain and improve the wild portion of the population because if the wild portion trends downward, the sport fishery is at risk of being closed. As the fishery grows in popularity, improved habitat needs to occur to sustain the fishery.

- **General Overview of Concerns:** The key concern is elevated sediment in stream channels, where the mainstem SFSR is 303(d) listed for sediment with a total maximum daily load (TMDL) approved in 1991, the nation's first non-point source TMDL. A secondary concern is water temperature and the SFSR and tributary streams are proposed for 303(d) listing (IDEQ 2011 305b report). To exacerbate the concerns, the 2007 Cascade Complex Wildfire consumed 85% of the watershed, with 76% having moderate to high fire severities. Eighty-one percent of the RCAs in the watershed experienced uncharacteristic moderate to high fire severities.

The 2000 SFSR Subbasin Review (USDA FS 2000) and 2002 SFSR Subbasin Assessment (IDEQ 2002) identified key watershed issues and developed recommendations to address those issues. Common in both analyses was that roads continue to be a major issue affecting water quality. In the 1960s concerns over sedimentation and fish habitat resulted in the Forest Service having a "moratorium" on any further logging and reducing land disturbing activities in the upper SFSR drainage. Road densities and Riparian Conservation Area (RCA) road densities are high. "Although large scale ground disturbing activities are non-existent, the roads built during that time continue to be the dominant source of sediment in the subbasin" (IDEQ 2002).

Anthropogenic sediment levels associated with high road densities, trails and dispersed recreational impacts and the anticipated increase of post-wildfire sediment are expected for the next 10 to 20 years which pose a high risk of negatively affecting water quality. Due to the importance of the watershed for delivering high quality water, three complex watershed restoration planning efforts have occurred since 2008; the 2009 SFSR Recreation Access Management Project, the 2009 Rice Creek Road Restoration Project, and the 2011 SFSR Resource Management Project. These NEPA analyses have all had the similar purpose and need to restore water quality. Many of the publicly controversial Essential Projects discussed below, have a completed NEPA decision including an approved travel analysis. Additionally, active partnerships have been developed with the Nez Perce Tribe, Idaho Department of Environmental Quality, Idaho Department Parks and Recreation, and Southwest Idaho Resource Advisory Committee for implementation of these projects.

- **Important Ecological Values:** The watershed is ecologically important to various watershed characteristics and species. Highly valued aquatic species including; Chinook salmon (Threatened), steelhead trout (Threatened), bull trout (Threatened), westslope cutthroat trout (R4 Sensitive), and several amphibian species such as the Idaho giant salamander occur within the watershed. This watershed is nested in the upper SFSR Subbasin, which historically produced up to 60% of the anadromous fish in the Snake River Basin. The Stolle Meadow area is a critical spawning area for Chinook salmon and steelhead trout and is key to the viability of the SFSR populations. This watershed contains one of the five major spawning areas for the populations and is also upstream of the four other major spawning areas. Additionally, the SFSR is identified as a suitable Wild and Scenic River where scenic, recreation, geologic, fisheries, cultural, and water quality are identified as remarkably outstanding values.
- **Current Condition Class:** Functioning at Risk (2.13)
Target Condition Class: Functioning At Risk

e. Key Watershed Issues

1) Attributes/Indicators within FS control to affect

ATTRIBUTES /INDICATOR	REASON FOR RATING
1.1 Impaired Waters	The SFSR has a TMDL for sediment since 1991 and was 303(d) listed in 1998. The Idaho Department of Environmental Quality has proposed developing a TMDL for stream temperatures in 2011. Numerous assessments have identified sediment as the most limiting watershed condition in the SFSR.
1.2 Water Quality Problems	The SFSR has a TMDL for sediment since 1991 and was 303(d) listed in 1998. The Idaho Department of Environmental Quality has proposed developing a TMDL for stream temperatures in 2011. Numerous assessments have identified sediment as the most limiting watershed condition in the SFSR. Approximately 167 tons/yr (2011 Draft SFSR GRAIP Report) of road related sediment is being delivered to the stream channels within the Stolle Creek subwatershed, resulting in anthropogenic sedimentation being delivered to the mainstem of the SFSR.
3.2 Large Woody Debris	LWD is currently high due to the recent stand replacing wildfire (2007 Cascade Complex). However this is expected to result in a long-term deficit in LWD as the current LWD will be removed from the system prior to the recruitment of new LWD is available >100 years.
3.3 Channel Shape and Function	High sedimentation has increased width-to-depth ratios and reduced stream channel-floodplain connection. Stream banks are altered due to roads within the RCAs as well as dispersed recreation sites within RCAs.
5.1 Vegetation Condition	Stands are largely removed by recent wildfires thereby reducing stream shading and leading to the increased risk associated landslide due to the reduction in tree root/soil strength.
6.1 Open road density	Stolle Creek subwatershed has a road density of approximately 1.95 mi/mi ² .

ATTRIBUTES /INDICATOR	REASON FOR RATING
6.2 Road Maintenance	Drainage features on roads and trails in some portions of the watershed are in need of repair and maintenance.
6.3 Proximity to water	Stolle Creek subwatershed has a RCA road density of approximately 1.78 mi/mi ² .
6.4 Mass Wasting	There are some roads and trails located on unstable landtypes within the subwatershed. There are some documented road related landslides within the subwatershed.
7.1 Soil Productivity	Several miles of authorized and unauthorized roads and trails have caused a substantial amount of acres to be converted to a total soil resource condition.
7.2 Soil Erosion	The GRAIP Inventory identified approximately 739 tons/year of soil erosion associated with the authorized and unauthorized roads and trails. An increase in soil erosion is associated with the 2007 Cascade Wildfire Complex that resulted in a large amount of uncharacteristic size and severity resulting in a substantial loss of forested vegetation for many decades into the future.

2) Attributes/Indicators that require other parties to address

ATTRIBUTES /INDICATOR	REASON FOR RATING
None	100% NFS lands and no other jurisdictions within the watershed.

2. Watershed Characteristics and Conditions

- a. **General Context/Overview of the Watershed: Refer to Sections #1 d i.-v.**
- b. **Watershed Conditions: Refer to Sections #1 d i.-v.**

3. Restoration Goals, Objectives, and Opportunities

a. Goal Identification and Desired Condition

Three primary purposes, with associated needs, have been identified for the Stolle Creek – SFSR Watershed: (Refer to Attachments A1 and A2) located at the end of this document that supports the Goals, Objectives and Opportunities).

Primary Purpose #1): Reduce road-related impacts and risks to water quality and fisheries resources according to the SFSR sediment TMDL while retaining a safe and efficient transportation system to meet current and future management, public access, and recreational needs.

Primary Purpose #2): Reduce recreation impacts and risks by improving the trail system to provide public access and recreation opportunities in the future while reducing unintended impacts to the environment.

Primary Purpose #3): Enhance recreational experience by providing educational and interpretive exhibits describing unique natural features in the upper South Fork Salmon River.

b. Objectives: National Strategic Plan Goals and Objectives and Boise National Forest-wide and Management Area Direction

- i. Alignment with National, Regional, or Forest Priorities. The Stolle Creek – SF SR integrated restoration essential projects are aligned with several of the National Goals and Objectives as follows:

Goal 1 - Restore, Sustain, and Enhance the Nation's Forests and Grasslands

Outcome: Forests and grasslands with the capacity to maintain their health, productivity, diversity, and resistance to unnaturally severe disturbance.

Objective 1.5 - Restore and maintain healthy watersheds and diverse habitats.

Goal 2 - Provide and Sustain Benefits to the American People

Outcome: Forests and grasslands with sufficient long-term multiple socioeconomic benefits to meet the needs of society.

Goal 4 - Sustain and Enhance Outdoor Recreation Opportunities

Outcome: A variety of high-quality outdoor recreational opportunities on the Nation's forests and grasslands are available to the public.

Objective 4.1 - Improve the quality and availability of outdoor recreation experiences.

Objective 4.3 - Improve the management of off-highway vehicle use.

Goal 7 - Provide Science-Based Applications and Tools for Sustainable Natural Resources Management

Outcome: Management decisions are informed by the best available science-based knowledge and tools.

The Boise National Forest has worked closely with the Rocky Mountain Research Station in the continuing development, implementation and application of the Geomorphic Road Analysis and Inventory Package "GRAIP" used to specifically quantify the extent and location of sediment contributions from roads to streams (refer to Attachment #2 at the end of this document). This is in alignment with the Forest Service providing science and technology solutions for clients' and partners' priority issues in ways they find effective and useful for sustainably managing forests and grasslands. This effort meets with the National Strategic Plans direction as follows:

To accomplish this goal, Research and Development (R&D) and Technology and Development (T&D) Centers will focus on the following objectives in this strategic planning period.

Objective 7.1 - Increase the use of applications and tools developed by Forest Service R&D stations and T&D centers. Means and Strategies for Accomplishing Goal 7

- Develop and make available cost-effective methods for transferring scientific information, technologies, methods, and applications.
- Provide information and science-based tools that are used by managers and policymakers.
- Develop and implement effective processes for engaging users in all phases of R&D study development.
- Develop and deploy analysis and decision-support systems.
- Develop tools for evaluating the efficiency and effectiveness of alternative management practices.

- ii. Alignment with State or local goals. The Stolle Creek - SFSR integrated restoration essential projects are aligned with important State of Idaho Department of Environmental Quality and US EPA water goals identified in the Sediment TMDL for the South Fork Salmon River. The reforestation essential project will overtime assist in the improvement of stream temperatures associated with the stream temperature 303(d) impaired water bodies.

The following are the specific goals and objectives identified by the Boise National Forest Plan for the Stolle Creek - SFSR area.

Boise National Forest – Forest-wide and Management Area Goals and Objectives

Objective	TEOB03	Identify and reduce road-related effects on TEPC species and their habitats using the Watershed and Aquatic Recovery Strategy (WARS), the Vegetation and Wildlife Habitat Restoration Strategy and Source Environment Restoration Strategy, and other appropriate methodologies.
Objective	REOB05	Identify and develop motorized use opportunities in locations appropriate for motorized uses through road to trail conversion, development of new trails, and other methods.
Objective	FROB06	Identify roads and facilities that are not needed for land and resource management, and evaluate for disposal or decommissioning.
Goal	Goal REGO03	Address current and emerging recreation conflicts, while maintaining recreation opportunities when possible.
Goal	REGO04	Manage recreation uses and facilities to mitigate degrading effects from recreation to other resources.

FY 2011 Watershed Restoration Action Plan
Cascade Ranger District, Boise National Forest

Goal	REGO05	Manage motorized and non-motorized travel and travel-related facilities to: a) Provide for public safety, b) Meet resource objectives and access needs, c) Mitigate road and trail damage, and d) Minimize maintenance costs and user conflicts.
Goal	SWG011	Manage human-caused disturbances to avoid or reduce degrading effects to aquatic populations, particularly during critical life stages.
In addition to the Forest-wide goals and objectives, the Warm Lake Management Area has specific direction on activities that would improve the watershed functions and processes in the Stolle Creek - South Fork Salmon River.		
Objective	1929	Improve water quality by reducing road- and trail-related accelerated sediment delivery to the South Fork Salmon River and its tributaries.
Objective	1930	Assist in de-listing the South Fork of Salmon River drainage from the State of Idaho's impaired water-bodies list by applying appropriate and active watershed restoration to reduce sediment, the identified pollutant source.
Objective	1932	Restore aquatic and riparian habitats in the South Fork Salmon River and its tributaries by reducing streambank instability or accelerated sediment resulting from existing roads and other disturbances.
Objective	1979	Evaluate passenger vehicle access needs to consider converting roads no longer needed for passenger vehicles to ORV trails.

c. Opportunities

- i. **Partnership Involvement:** The Boise N.F. has an active Watershed Restoration Partnership with the Nez Perce Tribe (NPT), utilizing Bonneville Power Administration (BPA) funds for salmon recovery efforts. In 2011, \$150,000 of BPA funds was used to support road decommissioning and coordination between the Boise N.F. and the NPT. The NPT has been involved in the planning, design, contracting, and implementation with technical expertise and funding. Additional organizations identified as potential partners include: Idaho Department of Environmental Quality (IDEQ), United States Environmental Protection Agency (US EPA), Idaho Parks and Recreation (IDPR), Trout Unlimited (TU) and the US Fish and Wildlife Service. The American Forest Foundation and the Arbor Day Foundation have in the past and are likely to be reforestation partners supporting the proposed essential reforestation project.

- ii. Outcomes/Output
- a) Performance Measure Accomplishment
Refer to section: e. Costs (Table)
- b) Socioeconomic Considerations:
Refer to section: e. Jobs (Table)

The current unemployment rate for Valley Counties for May 2011 was 19% (Idaho Department of Labor).

d. Specific Project Activities (Essential Projects)

(Refer to Attachments A1 and A2 located at the end of this document that support the Essential Projects). Note that all essential projects will be covered under an annual Noxious Weed Monitoring and Treatments program with an estimated cost of \$8,000 dollars per year for 5 years or \$40,000 total. These funds will be divided 80% NFVW and 20% RBRB.

- a. **Road Decommissioning Activity #1**
- Attribute/Indicator Addressed: 1.1 Impaired Waters, 1.2 Water Quality Problems, 6.2 Road Maintenance, 7.2 Soil Erosion
 - Project Description: A travel analysis identifying the minimum road system and a corresponding EA/Decision Notice was completed in 2011, modifying the existing road system by making the decision to decommission 27.5 miles of road in the watershed. Treatments include full road prism recontour to the extent possible and complete stream channel crossing restoration. Analysis showed that this activity would reduce the miles of road on highly erosive landtypes by 35%, with a modeled instream sediment delivery reduction of three tons per year, and a road density reduction from 1.95 to 1.09 mi/mi².
 - Partners Involvement: The Boise N.F. has an active Watershed Restoration Partnership with the Nez Perce Tribe (NPT), utilizing Bonneville Power Administration (BPA) funds for salmon recovery efforts. In 2011, \$150,000 of BPA funds was used to support road decommissioning and coordination between the Boise N.F. and the NPT. The NPT has been involved in the planning, design, contracting, and implementation with technical expertise and funding. The USEPA and the Idaho Department of Environmental Quality have been greatly involved in the improvement in the water quality beneficial uses within the South Fork Salmon River. It is likely that these two agencies will also be partners.
 - Timeline: Starting in April 2012 and continuing for 4 years. Implementation in 2012 through 2015. Implementation of this activity will be in conjunction with Unauthorized Route Decommissioning Activity #3.
 - Estimated Costs and BLI: The estimated cost is \$600,000 and is based on 2010 and 2011 road decommissioning contract costs. This activity is included in the 2010-2012 Legacy Roads and Trails Program for multiyear funding. Expected shared costs are; 40% CMLG, 10% NFVW/NFWF/CMRD, and 50% NPT/BPA funds.

b. Road Reconstruction Activity #2

- Attribute/Indicator Addressed: 1.1 Impaired Waters, 1.2 Water Quality Problems, 6.2 Road Maintenance, 7.2 Soil Erosion
- Project Description: In 2010/2011 the Geomorphic Roads Analysis and Inventory Process (GRAIP) Modeling was completed on all maintenance level 2-5 roads within the watershed. The modeling indicated that sections of four roads (NFS roads 483, 483A, 470, and 471) cause major contributions of sediment delivery to stream channels. Additionally and integrated with the GRAIP Modeling, the travel analysis prioritized and recommended road reconstruction of 9.9 miles on these four road segments. Reconstruction of these four road segments would reduce sediment delivery caused by roads in the watershed by an expected 40%. Specific treatment proposals are anticipated to be developed in 2012 with planning (NEPA) to occur in 2013.
- Partners Involvement: The Boise N.F. has an active Watershed Restoration Partnership with the Nez Perce Tribe (NPT), utilizing Bonneville Power Administration (BPA) funds for salmon recovery efforts. In 2010, \$200,000 of BPA funds was used to support reconstruct roads at six stream crossings and coordination between the Boise N.F. and the NPT. The NPT has been involved in the planning, design, contracting, and implementation with technical expertise and funding. Treatments include full road prism recontour to the extent possible and complete stream channel crossing restoration.
- Timeline: Starting in 2012 and continuing for 5 years. Design in 2012, NEPA 2013, Implementation 2014/2015.
- Estimated costs and BLI: Estimated cost is approximately \$1,200,000 based on costs of a similar project in 2009. This activity is included in the 2010-2012 Legacy Roads and Trails Program for out year funding. Expected shared costs are; 60% CMLG, 10% NFVW/NFWF/CMRD, and 30% NPT/BPA funds.

c. Unauthorized Route Decommissioning Activity #3

- Attribute/Indicator Addressed: 1.1 Impaired Waters, 1.2 Water Quality Problems, 7.1 Soil Productivity, and 7.2 Soil Erosion
- Project Description: A travel analysis identifying the minimum road system and recommended trail system, and a corresponding EA/Decision Notice was completed in 2011. The inventory and analysis identified 11.5 miles of unauthorized routes with no recommendations for those to become roads or trails. Analysis showed that this activity is causing similar sediment delivery as described in Road Decommissioning Activity #1 and would reduce the miles of unauthorized routes on highly erosive landtypes by 11.5 miles. Treatments include full route prism recontour to the extent possible and complete stream channel crossing restoration but to a lesser extent than in Road Decommissioning Activity #1.
- Partners Involvement: The Boise N.F. has an active Watershed Restoration Partnership with the Nez Perce Tribe (NPT), utilizing Bonneville Power Administration (BPA) funds for salmon recovery efforts. The NPT is expected to

assist in funding to decommission the unauthorized routes. The NPT has been involved in the planning and design, and is expected to assist in contracting, and implementation with technical expertise and funding.

- **Timeline:** Starting in April 2010 and continuing for 4 years. Implementation in 2012 through 2015. Implementation of this activity will be in conjunction with Road Decommissioning Activity #1.
- **Estimated Costs and BLI:** The estimated cost is \$90,000. This activity is included in the 2010-2012 Legacy Roads and Trails Program for multiyear funding. Expected shared costs are; 40% CMLG, 10% NFVW/NFWF/CMRD, and 50% NPT/BPA funds.

d. Motorized Trail Reconstruction Activity #4

- **Attribute/Indicator Addressed:** 1.1 Impaired Waters, 1.2 Water Quality Problems, 7.2 Soil Erosion
- **Project Description:** Reconstruct 2.7 miles of motorized trails on four trail segments. These four trail segments are stream adjacent or follow the fall line of the hillslope causing substantial sediment delivery to stream channels. The project would consist of relocating motorized trail treads to minimize or alleviate sediment delivery to stream channels.
- **Partners Involvement:** The Boise N.F. has an active Watershed Restoration Partnership with the Nez Perce Tribe (NPT), utilizing Bonneville Power Administration (BPA) funds for salmon recovery efforts. The Boise N.F. has also been very successful acquiring Idaho Department Parks and Recreation (IDPR) Grants for recreation related project. The NPT is expected to assist in planning, design, and implementation and the IDPR is expected to assist in implementation funding and technical expertise.
- **Timeline:** Starting in June 2012 and continuing for 3 years. Design 2012, NEPA 2013, Implementation 2013/2014.
- **Estimated Costs and BLI:** The estimated cost is \$75,000. Expected shared costs are; 30% CMLG, 40% CMTL/NFRW, and 30% IDPR Grant funds.

e. Post Wildfire Reforestation Activity #5

- **Attribute/Indicator Addressed:** 1.1 Impaired Waters, 1.2 Water Quality Problems, 2.1 Flow Characteristics, 3.2 Large Woody Debris, 5.1 Vegetative Condition, 7.1 Soil Productivity, 7.2 Soil Erosion
- **Project Description:** Reforest through conifer plantings approximately 6,225 acres within the watershed that burned at moderate to high fire intensity in the 2007 Cascade Complex Wildfire. Planting efforts would focus on reforesting acres that burned at a high or moderate intensity where competing vegetation was expected and/or where no seed source was present to facilitate natural regeneration. Artificial regeneration on these sites would enhance survival of conifer trees and greatly reduce the time necessary for the sites to return to a forested condition. Although the benefits would not be immediate, establishment of conifers would increase slope stability, reduce the potential for mass erosion events, reduce sediment delivery to streams, improve streambank condition, shading and long term large woody debris recruitment.

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Cascade Ranger District, Boise National Forest

FY	Task	FS Cost	Partner cost
12	Road Decommissioning Activity #1 Unauthorized Route Decommissioning #3	\$75,000	\$75,000
12	Road Reconstruction Activity #2	\$20,000	\$5,000
12	Motorized Trail Reconstruction Activity #4	\$5,000	\$0
12	Post Wildfire Reforestation Activity #5		
13	Road Decommissioning Activity #1 Unauthorized Route Decommissioning #3	\$75,000	\$75,000
13	Road Reconstruction Activity #2	\$25,000	\$5,000
13	Motorized Trail Reconstruction Activity #4	\$10,000	\$0
13	Post Wildfire Reforestation Activity #5	\$90,000	\$10,000
14	Road Decommissioning Activity #1 Unauthorized Route Decommissioning #3	\$75,000	\$75,000
14	Road Reconstruction Activity #2	\$350,000	\$50,000
14	Motorized Trail Reconstruction Activity #4	\$20,000	\$0
14	Post Wildfire Reforestation Activity #5	\$760,000	\$40,000
15	Road Decommissioning Activity #1 Unauthorized Route Decommissioning #3	\$75,000	\$75,000
15	Road Reconstruction Activity #2	\$300,000	\$95,000
15	Motorized Trail Reconstruction Activity #4	\$20,000	\$20,000
15	Post Wildfire Reforestation Activity #5	\$760,000	\$40,000
16	Road Reconstruction Activity #2	\$300,000	\$50,000
16	Post Wildfire Reforestation Activity #5	\$760,000	\$40,000
12- 16	Noxious Weed Monitoring and Treatments	\$40,000	\$0

g. Other Partners

Other interested potential partners are the Pacific Coastal Salmon Restoration Group, Idaho Department Parks and Recreation, Idaho Department of Environmental Quality, Environmental Protection Agency, Southwest Idaho Resource Advisory Committee, Valley County, and Idaho Department of Fish and Game.

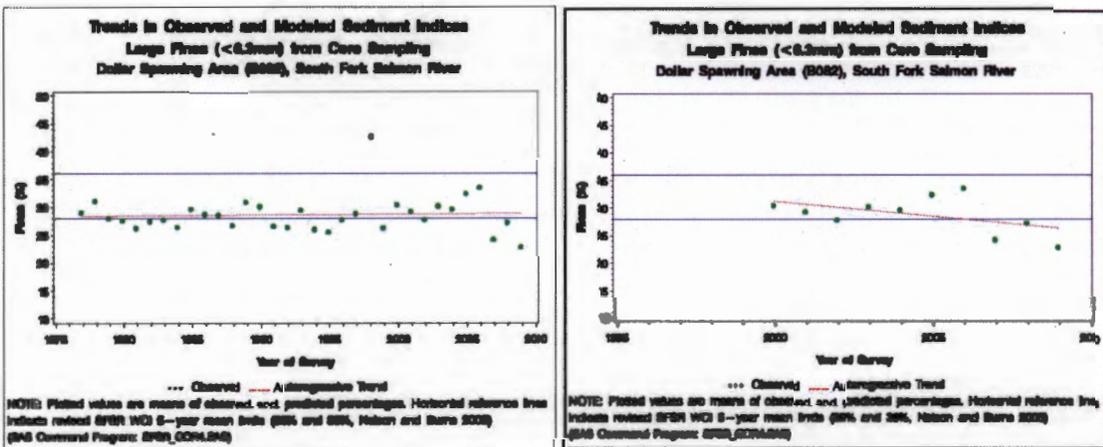
4. Restoration Project Monitoring and Evaluation

- a. The forest will monitor:** The Forest will continue the intergravel monitoring in the SFSR downstream of the Stolle – SFSR Watershed. Sediment monitoring in the SFSR began in

response to severe flooding caused by rain on snow in the winter of 1964-65 that inundated important habitat for anadromous fish (Nelson *et al.* 2002; Platts *et al.* 1989). Monitoring was begun with core sampling using techniques modified from McNeil (1964), and Platts *et al.* (1989) present trend analyses dating back to 1966. Formal sediment monitoring by the Boise National Forest (BNF), however, began in 1975 (Corley 1976). The effort was begun using a 6-inch core sampler at five permanent locations in known spawning areas on the SFSR and in one such location on Johnson Creek, as a control site.

One of the five permanent sites is the Dollar Creek is located approximately five miles downstream from the Stolle – SFSR Watershed. This site along with the Jonson Creek site (control) will continue to be monitored in association with the Watershed Restoration Action Plan.

Long term trend (1977-2009) and short term trend (2000-2009) at Dollar Creek.



- b. **Monitoring will be done in cooperation with:** This monitoring will be in cooperation with any and all partners associated with the planning, design, and implementation of the Essential Projects. Additionally, cooperation will continue between the Boise and Payette National Forests to continue the intergravel monitoring in the SFSR.

Action Plan Date: September 30, 2011

Reviewing Official and Title: Cecilia R. Seesholtz Forest - Supervisor Boise National Forest

Forest Contact Information: John L. Thornton 208-373-4153

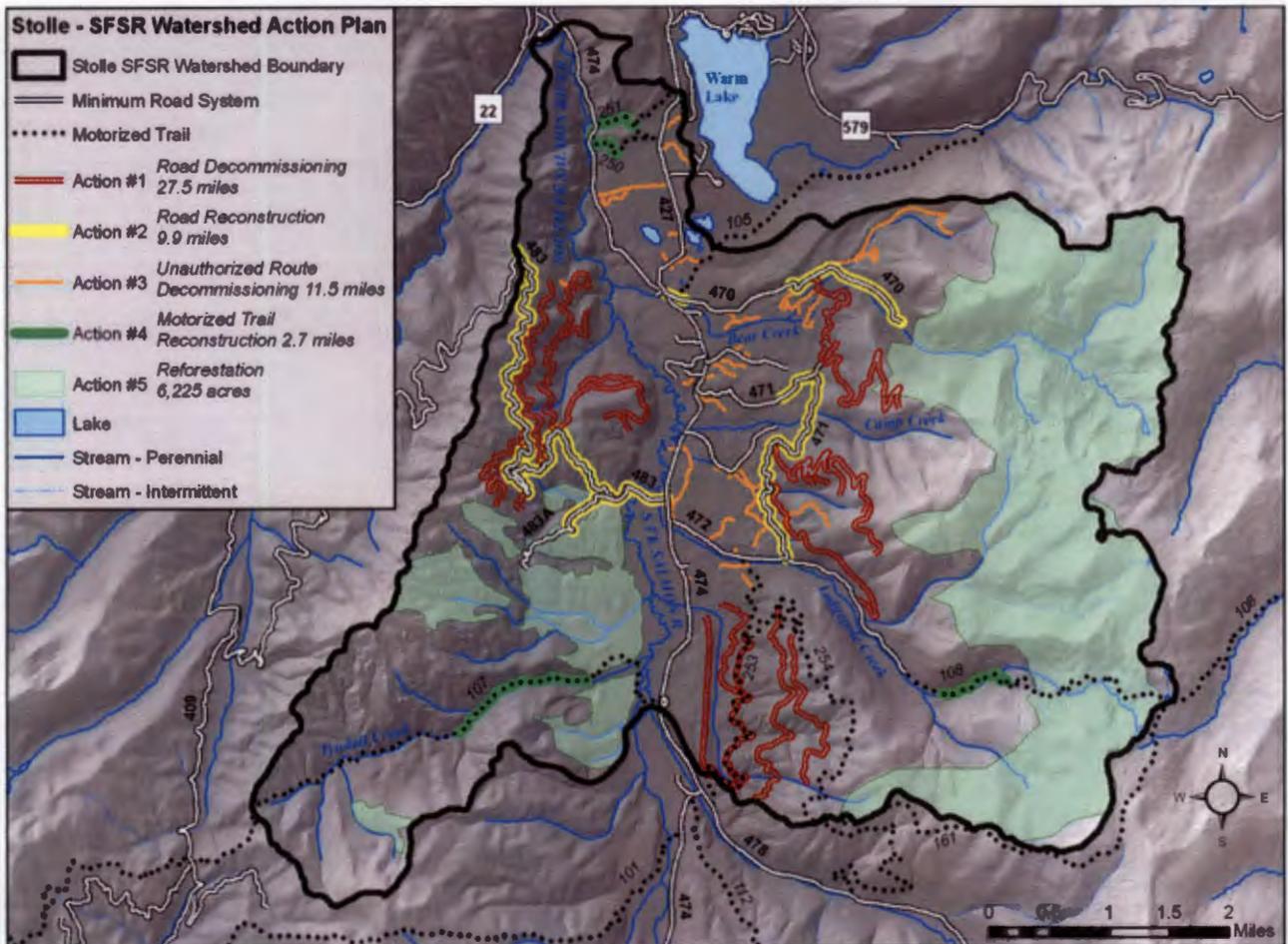
**FY 2011 Watershed Restoration Action Plan
Cascade Ranger District, Boise National Forest**



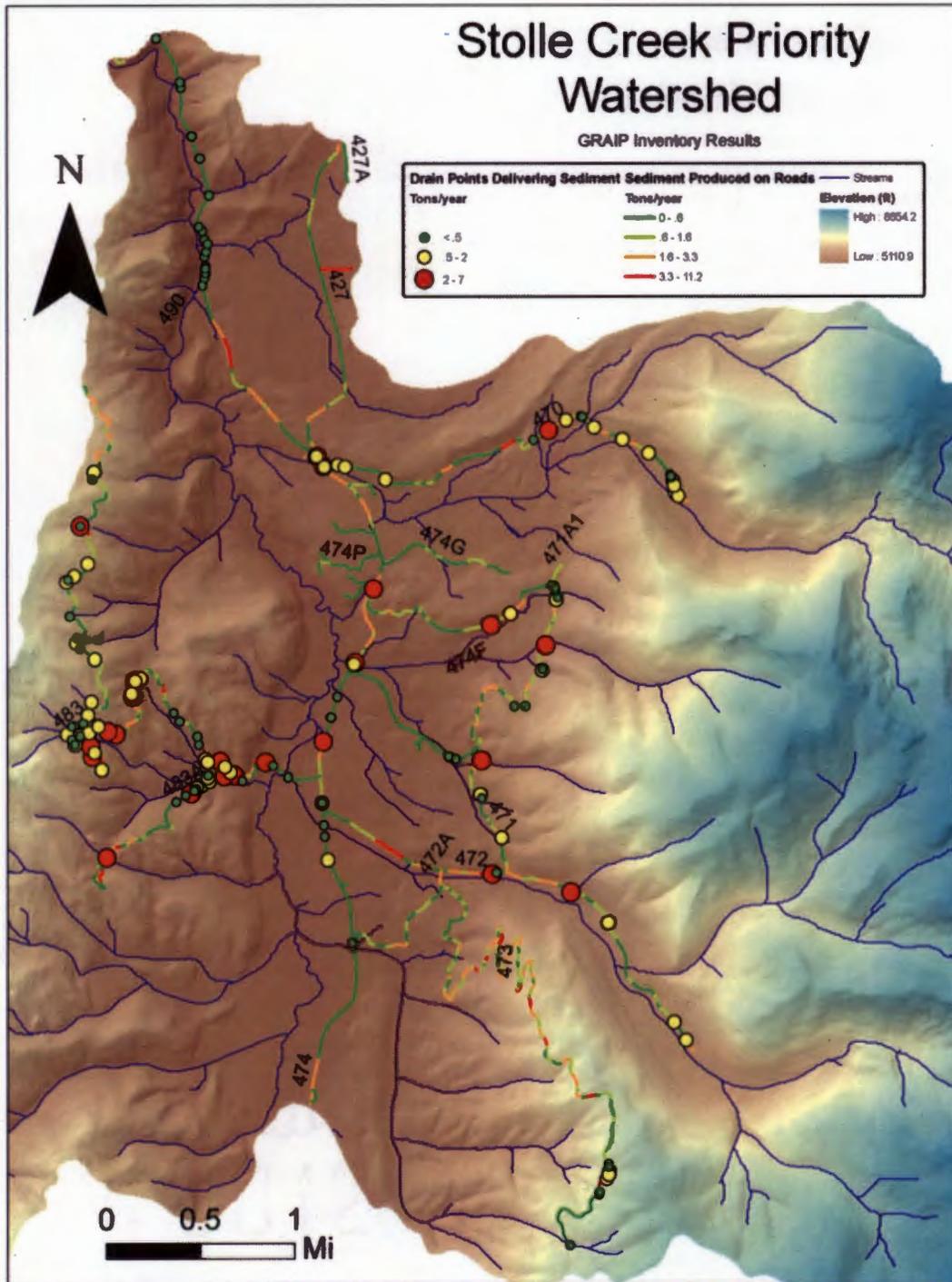
Attachments for Stolle Creek - SFSR Watershed Restoration Action Plan

The following figures (A1 and A2) are in support of the Stolle Creek SFSR Watershed Restoration Action Plan.

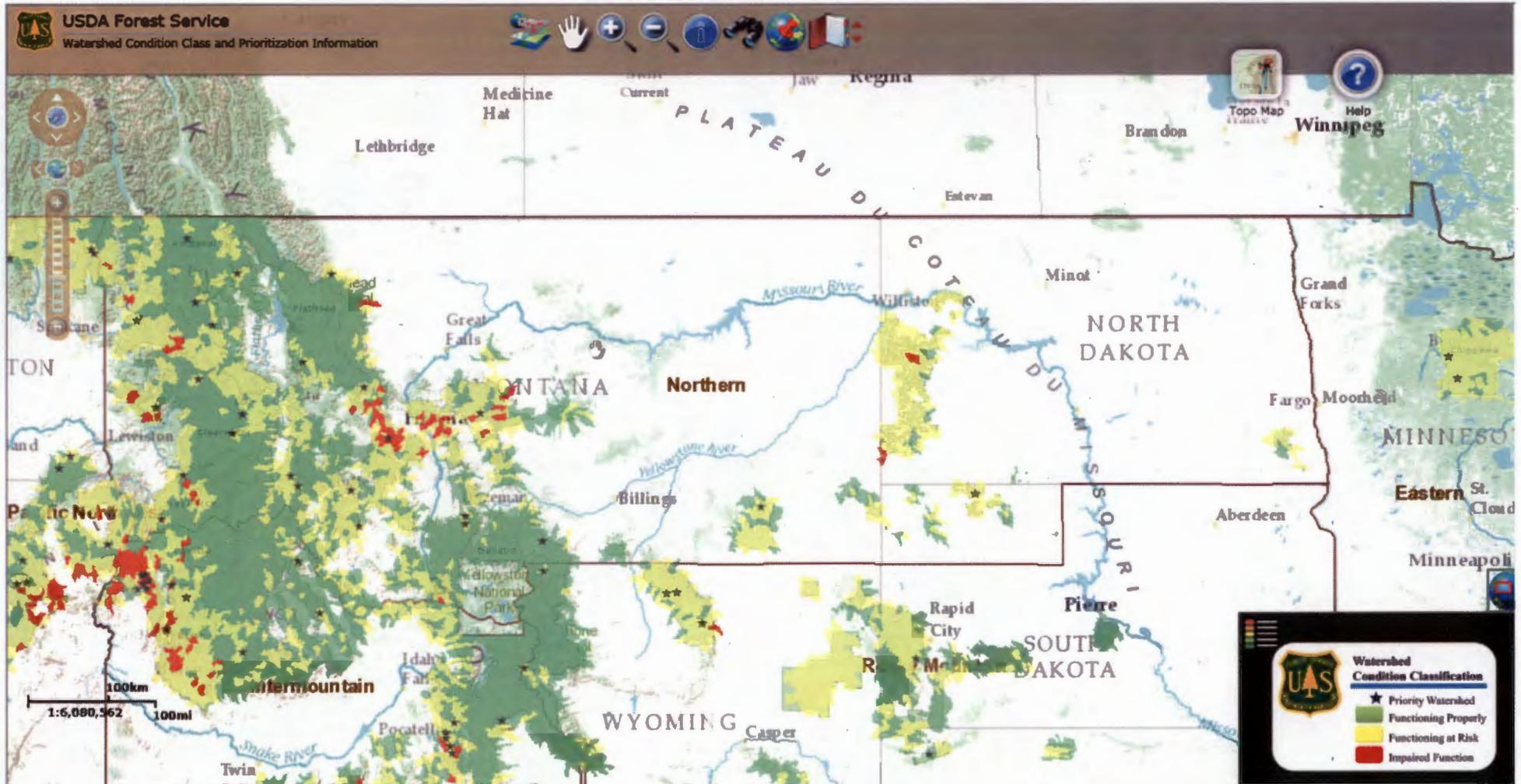
A-1 Proposed Stolle Creek - SFSR Watershed Restoration Activities



A-2 GRAIP Findings – Stolle Creek - SFSR Watershed



USDA – FS Region 1 (IRR Pilot Region)



Accessible via <http://apps.fs.usda.gov/WCFmapviewer/>

USDA – FS Region 3 (IRR Pilot Region)

