Landscape Scale Restoration Project Report

Project Name: Grimes and Mores Creek Watershed Restoration

Funding Year: 2009

Stakeholders

Forest Service Region: USDA Forest Service - R1

Sponsoring Organization: Idaho Dept. of Lands

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Participating Organizations:

Grantee: Idaho Dept. of Lands

Project Funding

Agreement(s): 09-DG-11010000-009

Funding Sources

Project Design

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Project Purpose

This project is part of a larger Mores Creek watershed restoration effort to address the adverse historic impacts of abandoned mines on forests. Grimes Creek, located northeast of Boise, Idaho, is the major tributary to Mores Creek. The watershed includes a mix of privately owned, state, and federal lands. This project is located on private land, near the historic mining community of Centerville, Idaho. The Mores Creek watershed is the only aquatic system that fish can access between the Arrowrock and Lucky Peak dams. The area is dry conifer forest, managed for production of forest products. Because of its location close to Boise, the area also provides important recreation opportunities.

The objective of this project is to restore the function and structure of riparian areas within the watershed, to benefit the local community. To meet that objective, Idaho Department of Fish and Game and Trout Unlimited are working together to develop a model process for planning and implementing riparian restoration projects that incorporate science- based planning, collaboration, volunteers, and monitoring. Reduction in the intensity of flood flows and improvement in water quality, fish and wildlife habitat, and recreation opportunities are some of the expected outcomes from this project.

This project has three parts: 1. restoration site prioritization and riparian vegetation planting guide; 2. riparian restoration of Grimes Creek; and 3. establishing a volunteer team. A pilot program using the volunteer team for riparian restoration will occur based on the methodologies developed during the first year of the project.

National Themes & Outcomes

Conserving and Managing Working Forest Landscapes

- High priority forest ecosystems and landscapes are identified and conserved.

Protect Forests from Threats

- Fire-adapted lands are restored and risk of wildfire impacts is reduced.
- Threats to forest and ecosystem health are identified, managed and reduced.

Enhance Public Benefits from Private Forests

- Water quality and quantity is protected and enhanced.
- The economic benefits and values of trees and forests are maintained and enhanced.
- Wildlife and fish habitat is protected, conserved, and enhanced.
- People are connected to trees and forests and are engaged in environmental stewardship activities.
- Trees and forests are managed and restored to help mitigate and adapt to changing conditions.

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Strategic Issues

Idaho's Forest Action Plan includes goals to reduce threats and increase benefits to forest systems in the Mores/Grimes drainage. Restoration efforts within this watershed began in 2005 and provide the largest contiguous floodplain created to date, reconnecting riparian areas that were once isolated due to dredge mining. Planting ponderosa pines on the adjacent higher elevation ground will reconnect the forest with the riparian area. Additionally, the information learned from condition assessments and site classifications, the riparian vegetation-planting guide, and the volunteer program manuals will increase efficiency and effectiveness of future riparian restoration efforts in Idaho.

Collaboration & Partners

Four years ago, stream restoration within the Mores Creek watershed began on the Boise National Forest. Work has continued within the watershed as Trout Unlimited, West Central Highlands Resource Conservation and Development, Idaho Fish and Game, Idaho Department of Lands, Idaho's Office of Species Conservation, private landowners, volunteers and students, have systematically worked within the watershed to restore streams. Primarily, partners in this project include Trout Unlimited, Idaho Department of Fish and Game, Idaho Office of Species Conservation, private landowners, and volunteers.

Accomplishments

Deliverables

1) Site Prioritization and Planting Guide: Riparian environments within the Boise-Mores subbasin will be classified and their ecological condition assessed. Results will be mapped to show areas ranging from lowest ecological integrity, but most difficult to restore, to highest ecological integrity and used to prioritize future restoration projects. A site-specific restoration plan for the Grimes project area will be developed, along with a user-friendly planting guide to be used to maximize success of restoration efforts.
2) Restoration of Grimes Creek: One-half mile of Grimes Creek will be restored. This includes removing mine tailings and planting the new floodplain with native vegetation. The expected outcomes are reduced flood intensity, improved water quality, fish and wildlife habitat and recreation opportunities. Scientists will monitor the restored area to determine the project's effectiveness.
3) Establishing Volunteer Teams: Two instructional manuals will be developed that describe methodologies for recruiting and training volunteers. Volunteers will be recruited and trained in riparian restoration practices, and will participate in planting Grimes Creek and other southern Idaho riparian projects.

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Accomplishments to Date

The Grimes Creek project has been successfully completed. The overall accomplishments for this project are as follows:

1) Site Prioritization and Planting Guide: Within the Grimes Creek Mores Creek sub-basin, data was collected and assessed to classify sites for riparian restoration. Geographic Information System and landscape assessment tools were used to analyze the data and the findings were reported and mapped in a technical report titled Watershed and Reference-based Riparian Restoration Planning for Grimes Creek and the Boise-Mores Sub-basin, Idaho. Additionally, a planting guide was developed titled Riparian and Wetland Restoration Planting Guide for the Boise and Payette River Basins, Idaho. This educational document was built off the results reflected in the technical report and will help landowners, communities, the U.S. Forest Service, and others decide which plants are most appropriate for restoring riparian and wetland habitats at their sites.

2) The riparian restoration component included restoring nearly a ¼-mile of stream bank and creating over one acre of new floodplain through removal of mine tailings, and planting approximately 975 trees and shrubs. Additionally, to connect the upper forest with the riparian floodplain in a two-acre area, adjacent upland mine tailings were contoured, soil amended, and 800 pine seedlings planted. To encourage plant survival, volunteers watered the plants through dry summer months. Monitoring before, after and during the 2010-2012 implementation phase of the project was conducted and the methodology and results reported in the document titled Grimes Creek Riparian Restoration Monitoring 2010-2012.

3) Establishing Volunteer Teams: Two manuals, the Volunteer Handbook for Riparian Restoration (for training volunteers) and the Use of Volunteers in Riparian Habitat Restoration (for volunteer coordinators) were developed and distributed to provide guidance to volunteers, professionals and organizations conducting riparian restoration. Volunteers were recruited and trained in riparian restoration methods. Additionally, nine volunteers attended a 3-day professional workshop on riparian restoration, six volunteers attended one-day hands-on training, and one volunteer was trained in monitoring techniques. 528 Volunteers donated over 2,796 hours to plant, water and monitor the Grimes project and other riparian restoration sites in southern Idaho. As a result, approximately .28 miles at the LQ drain site and one mile of the Little Wood River area were also restored through planting.

Deliverables in Progress

Project is complete. The deliverable reports and manuals will continue to be utilized and distributed by the Idaho Fish and Game and Trout Unlimited beyond this project's end.

Challenges

None at this time

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Information Last Updated
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