Upper Kootenai Watershed Restoration Project

Annual Report: FY 2001

Kootenai Falls, near Troy, Montana

US Department of Agriculture
Forest Service
Kootenai National Forest
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I. Partnership Overview

The Upper Kootenai subbasin, located in Northwestern Montana, includes 1.4 million acres extending from the Canadian border south/southwest to the Idaho border. The watershed has some of the most productive and biologically diverse forestlands in Montana, and includes many features that are unique and valued by people (figure 1).

Figure 1. Upper Kootenai Subbasin Special Features

This is the second year of the Upper Kootenai Watershed Restoration project. A major accomplishment for the Forest this fiscal year was completing the Upper Kootenai Subbasin Review. The Review identified restoration opportunities for this watershed, which is 62 percent of the acreage of the Kootenai National Forest (figure 2).
This document is a blueprint for restoration, identifying opportunities that may interest potential partners among other agencies and community groups. The analysis documents the magnitude of restoration needs, which will help in focusing potential monies in areas with high priorities.

II. Partnership Goals

The mission statement for the Project is: To protect, maintain and restore watershed health, and ecosystem condition through application of ecosystem management principles while providing for a range of uses, values, products and services. This mission cannot be achieved without cooperation and development of strong working partnerships. The Forest will use the Upper Kootenai Review and Business Plan to focus and direct discussions with partners and communities to develop trust, commitment and financial support. The goal is to establish a coalition of partners to help us meet our mission.
III. Accomplishments

1. The major accomplishment for FY2001 is the Upper Kootenai Subbasin Review. It will be the basis for establishing partnerships and restoring the Upper Kootenai Watershed. The purpose of the Review is to characterize the ecological and social conditions in the subbasin and to provide a context for future decisions on National Forest lands. This document describes the status of ecosystem diversity, identifies risks to ecological sustainability and prioritizes areas for future restoration projects. The Review also described the social and economic setting of the watershed. The Review assessed resource status and condition as well as risks and opportunities, to provide context and priority for future restoration and enhancement projects. This analysis will be used to identify priority restoration needs for potential partners.

![Figure 4. Priority by Planning Subunit](image)

In the Review, smaller watersheds (Planning Subunits) within the Upper Kootenai watershed were prioritized based on the composite rating of their ecological and other components. Figure 4 shows the relative composite ratings. Within these smaller watersheds, restoration opportunities were identified. This document will help focus restoration work on the Forest as well as identify additional priority work that could involve our partners.
2. Another accomplishment in FY2001 was the completion of the Glen Lake Irrigation District (GLID) Diversion project. The log dam on Grave Creek was removed under the Upper Kootenai Restoration Project in FY2000. This irrigation diversion dam had become a barrier to spawning fish. At the same time, the irrigation ditch became a population sink for adult and juvenile fish, including TES bull trout. In FY2001, the GLID project replaced the dam with a series of rock weirs that allowed diversion while still maintaining fish passage and the hydrological function of the channel. As part of the project, a sixty-foot self-cleaning screen was placed in front of the ditch head gate to keep fish out of the irrigation ditch.

The benefits to the fisheries resources within the Grave Creek drainage are substantial. The project is expected to help restore the Tobacco Grave bull trout (endangered) metapopulation by improving habitat continuity and reducing the potential loss of several hundred bull trout and westslope cutthroat trout. The project facilitates the GLID’s exercise of its water rights with minimal risk to native fish.

Other partners involved in the project include: Montana Department of Fish, Wildlife and Parks; US Fish and Wildlife Service; GLID; American Fisheries Society; and the Kootenai River Network. The positive outcomes included a strong working relationship between the agencies and water users. Participation from the involved groups will continue during monitoring of the project. Future channel improvement works in the private downstream sections are ongoing because of the successful partnership built during the GLID Diversion improvement project.
3. In the Upper Kootenai Watershed, 2,550 acres of big game habitat enhancement were accomplished with prescribed fire. Funding sources in FY2001 included the Rocky Mountain Elk Foundation, Bonneville Power Authority (Libby Dam mitigation) and Kootenai National Forest.

The Forest plans to continue the partnerships with the Montana Department of Fish, Wildlife and Parks (MDFWP) and the Rocky Mountain Elk Foundation to restore and improve wildlife habitat. Currently an Environmental Assessment has been completed to treat 60,000 acres of habitat of which approximately 48,000 acres are within the Upper Kootenai watershed.

4. Road restoration work to reduce sediment delivery to streams and enhance fish passage was accomplished throughout the Upper Kootenai Watershed. This work consisted of installing new road culverts (100+), replacing undersized culverts (10), surfacing (13 miles), improving road surface drainage and bringing roads up to State Best Management Practices (BMP) standards (80 miles). Decommissioning of 39 miles of road was accomplished. Another 159 miles of road was improved and brought up to BMP standards by the Forest’s timber sale purchasers.
5. The Tobacco River Vegetation Restoration and Fuels Treatment Project was initiated in FY2001. A contract was awarded to thin an overstocked stand and also do hazardous fuels abatement on 100 acres. This area is adjacent to a heavily used recreation area and close to the community of Rexford. Working with the community and the local residents, the work will consist of thinning the stand, using equipment to pile the slash and salvaging products such as firewood, post and poles.

6. Aggressive treatment of noxious weeds continued in the subbasin. Noxious weeds can dramatically alter the composition, structure and function of native plant communities, reducing biodiversity, changing species interactions and forage availability and reducing the system’s ability to buffer against changes. Current control efforts in the subbasin are aimed at eradicating new invaders and containing existing infestations. We have a partnership with the Lincoln County Weed Board, State of Montana and Plum Creek Timber Company to treat and monitor lands infested with noxious weeds. This year the Forest treated 2,000 acres with pesticides and biocontrols.

7. The wildland fires of 2000 burned 45,000 acres on the Forest of which 28,000 acres were in the Upper Kootenai Subbasin. Through the National Fire Plan, the Forest has completed a number of restoration projects in the burned area. These projects include reforestation (831 acres), Fisheries and Watershed restoration (10 miles surveyed and 18 pool structures installed), invasive plant treatments (420 acres), trail restoration (23 miles), road restoration (53 culverts, 55 drain dips installed on 19 miles) and assessment work. Restoration of the fire area will continue into FY2002. The Forest is working with the local Trout Unlimited (TU) Chapter to help facilitate the stream survey work needed in FY2002. The TU Chapter is receptive to this project and will be a potential partner in other stream restoration endeavors.
IV. Challenges and Change

Management of the national forest tends to be controversial. Some of the general areas of controversy that we perceive may impact the Upper Kootenai Watershed Restoration Project are as follows:

- **Road Access** – Closing, stabilizing or removing damaging roads will create concerns by a large number of different interest groups.

- **Timber Harvest Levels** – Timber harvest levels on the Forest have been declining for a number of reasons (figure 5). The rural communities within the Upper Kootenai subbasin have historically been socially and economically dependent on timber harvest. Some of our customers would like timber harvest levels to be maintained or increased. Others perceive the forest may use restoration activities as a disguise or excuse for harvesting timber.

- **Management of Roadless Areas** – The conflict over management or roadless areas has been well established for several decades. There is increasing conflict with the concern over forest health and the desire to leave roadless areas unroaded. Managing these areas while retaining their roadless character will be difficult with potential for conflict.

- **Economic Stability** – Lincoln County has experienced double-digit unemployment for several decades. The county is highly dependent on management of the Kootenai National Forest (figure 6). Some of our customers see restoration activities as having potential for providing local jobs and income. Others want to see management revert to “the way it was”, with much higher timber harvest volume levels.
V. Future Actions and Opportunities

Our capability to accomplish restoration in the Upper Kootenai Watershed is dependent on our ability to establish strong working partnerships with all our potential partners. With these partnerships, more projects that protect, maintain, enhance and restore watershed health can be achieved. Some of the future actions and opportunities are:

- There are numerous restoration projects that were identified in existing watershed assessments in the Upper Kootenai Project area that have not been funded. These projects will be accomplished as funding (Large-scale Watershed Project and other) becomes available.

- Continue to use Trust Fund (KV, 10% fund) from commercial restoration projects to finance watershed improvements associated with those projects. Use these funds to do stream restoration and improve road facilities to reduce impacts on watershed.

- Continue the partnerships with the Montana Department of Fish, Wildlife and Parks (MDFWP) and the Rocky Mountain Elk Foundation to restore and improve wildlife habitat. This will be accomplished with the use of prescribed fire and some mechanical treatments.

- In accordance with point three of the National Fire Plan (NFP), Hazardous Fuel Reduction; we will work with local governments and landowners to reduce risk of wildfire to local communities. Continue to work with local governments in fire planning efforts.

- Continue to work with local landowners and homeowners associations to extend fuel reduction across private and Forest boundaries.

- Continue to develop stewardship projects like the Treasure Interface Project where, in essence, the Forest is trading commercial goods for restoration work. The local landowners and the Forest Service are cooperating to reduce the threat of wildfire to their property and Forest lands developed this project. This project will commercially thin 705 acres, where the product value will be traded for stream restoration work, noxious weed eradication, some non-commercial fuel reduction projects, aspen planting, ski trail extension, road improvements, recreational improvements, nesting platforms and boxes.

- Under NFP, key point two, rehabilitation and restoration, continue to restore the ecological processes associated with frequent, low intensity fire regimes on the drier vegetation types to reduce natural fuel loadings. Commercial treatments may be necessary to reduce fuels in some areas to achieve low intensity fires.
• Increase the scope of the invasive plant treatment program within the project area.
• Work in cooperation with both Lincoln and Sanders Counties to develop a partnership in developing restoration projects. The Forest would work with the county Resource Advisory Committee that is composed of 15 members representing community interests. This would be in conjunction with Public Law 106-393, Secure Rural Schools and Community Self Determination Act of 2000.

VI. Partnership Budget/Costs

The Kootenai Forest spent over 2 million dollars in the Upper Kootenai Watershed in fiscal year 2001. It will use the Upper Kootenai Subbasin Review, which was completed this year, to help develop a coalition of partners to help with restoration in the watershed. Help will consist of using their input for selecting areas and projects, and also funding. The business plan for the Upper Kootenai will be used to help leverage these funds. The Forest is hiring a grant writer and public information officer who will help facilitate this process. The Forest would like to see the percentage of funding from our partners increase from 7 percent to 10 percent in the near future (figure 7).

It is difficult at best to put a value on these investments, since the improvements are cumulative over time. We do know that we are headed in the right direction, maintaining and improving the overall health of the Upper Kootenai Watershed.

VII. Partnership Contacts

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