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Protect and Restore Red River Watershed

Annual Report CY 2008

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Abstract

The Nez Perce Tribe Department of Fisheries Resource Management, Watershed Division approaches watershed restoration with a ridge-top to ridge-top approach. The Nez Perce Tribe (NPT) and the Nez Perce National Forest (NPNF) have formed a partnership in completing watershed restoration activities, and through this partnership more work is accomplished by sharing funding and resources in our effort.

The Nez Perce Tribe began watershed restoration projects within the Red River Watershed of the South Fork Clearwater River in 2001. Progress has been made in restoring the watershed through road decommissioning and culvert replacement. From completing a watershed assessment to two NEPA efforts and a final stream restoration design, we will begin the effort of restoring the mainstem channel of Red River to provide spawning and rearing habitat for anadromous and resident fish species. Roads have been surveyed and prioritized for removal or improvement as well as culverts being prioritized for replacement to accommodate fish passage throughout the watershed.

Another major, and extremely, important component of this project is the Red River Meadow Conservation Easement. We have begun the process of pursuing a conservation easement on approximately 270 acres of prime meadow habitat (Red River runs through this meadow and is prime spawning and rearing habitat).

Acknowledgements

Acknowledged below is a list of people who worked very hard on this project demonstrating great enthusiasm and commitment to make it a success.

U.S. Forest Service, Nez Perce National Forest: Joe Bonn, Engineer

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U.S. Forest Service, Nez Perce National Forest: Dave Mays, District Fish Biologist

U.S. Forest Service, Nez Perce National Forest: Andy Bryden, District Hydrologist

Nez Perce Tribe:

Project Leader: Stephanie Bransford, Biologist III

Project Technician: Phyllis Heath, Technician III

Background

The Red River watershed is a very large and important watershed within the South Fork of the Clearwater River Subbasin. The watershed contains a disproportionately high amount of the aquatic potential in the South Fork Clearwater River Subbasin, therefore playing a vital role in aquatic species conservation and recovery (USDA 1999). The Red River watershed is approximately 103,348 acres in size and arises from Dixie Summit in the south and an area near Red River Hot Springs in the northeast, and then flows into the South Fork Clearwater River below Elk City, Idaho.

Red River has had a large amount of management activity. The watershed has been affected by historic mining, a moderate level of roads that encroach on stream/riparian processes, and grazing effects along the mainstem. There have been about 23,000 acres of timber harvest in Red River (22% of the area and 37% of the harvest in the South Fork Clearwater River Subbasin). About 5,000 acres of this harvest has been in the Riparian Habitat Conservation Area (RHCA) (about 25% of the RHCA Roads in the South Fork subbasin). There are very few large areas of low development. However, where they do exist, most are in the upper subdivision. The current Equivalent Clearcut Area (ECA) for the watershed is 12% and the current modeled sediment yield is 24% over natural base (the highest in the South Fork Subbasin). The overall condition rating for Red River is low, with a portion of the upper drainage rated moderate. The Forest Plan fish/water quality objective established for Red River is 90%. The current condition is considered well below this objective, greater than 20% below Forest Plan Objective (USDA 1998). Many streams in Red River are designated as water quality limited by the State of Idaho because of high sediment yield.

The aquatic condition and the population dynamics of aquatic species have been influenced by this change in disturbance regimes. There has been a reduction in habitat condition based on both the change in disturbance frequency, and the streams' sensitivity to change. The watershed has changed from a condition with patches of active disturbance/recovery, surrounded by areas of stable, high quality habitat, to a condition of homogenously degraded habitat (USDA 1998). The ability of aquatic species to persist has been reduced, and the ability to rebuild or refound areas from local stronger populations has also been reduced (USDA 1998).

Red River has spring Chinook salmon, steelhead, bull trout, and westslope cutthroat present in the watershed, with wide distribution (USDA 1998). While generally found in low numbers, there are pockets of higher densities. Pacific lamprey are found migrating into Red River in relatively high numbers. Brook trout, and small numbers of rainbow hatchery rainbow are present and widely distributed through the watershed with some areas of high density. Red River is considered a historic stronghold for all four fish species at risk assessed (USDA 1998).

Aquatic restoration is a high priority for this watershed (USDA 1998). The sediment regime should be the primary focus of aquatic restoration (USDA 1999). The unique aquatic potential of this watershed makes it an important watershed to restore. Even given the high level of historic management activity, and the presence of brook trout, this watershed still supports aquatic species at relatively high levels (USDA 1998). This is probably due to both restoration efforts that have been accomplished in the watershed and the watershed's inherent high capability. With the very high capability of this watershed, even at a reduced condition, this watershed can play a vital role in aquatic species conservation in the subbasin (USDA 1998).

Restoration of this watershed is necessary to stabilize existing populations, along with providing the best opportunity for a long-term population source area in the future.

Work Elements

- A : 165. Produce Environmental Compliance Documentation - Provide environmental compliance information to BPA
- B. 119. Manage and Administer Projects – Management, Coordination and Communication.
- C : 47. Plant Vegetation – Red River Riparian Re-vegetation
- D : 172. Conduct Pre-Acquisition Activities – Red River Meadow Conservation Easement
- E : 157. Collect/Generate/Validate Field and Lab Data – Removed roads data collection
- F : 157. Collect/Generate/Validate Field and Lab Data - Stream habitat data collection
- G : 162. Analyze/Interpret Data – Condition/Health of Red River
- H: 132. Produce Annual Report - Annual report
- I: 185. Produce Pisces Status Report - Periodic status reports for BPA

Results

Environmental Compliance

All NEPA and consultation documents have been completed for all restoration activities covered under this project and have been forwarded on to the BPA NEPA specialist for this project, Colleen Spiering.

Coordination and Management

Coordination and pre-work meetings between the Nez Perce Tribe and the Nez Perce National Forest were held throughout the contract period to organize activities that would be completed and protocols that would be used to complete those activities. Written agreements were signed between the Nez Perce Tribe and the Nez Perce National Forest to document each entities roles in the project as well as the cost share for each agency. Nez Perce Tribe employees attended relevant BPA meetings, reporting and accrual estimates were completed and submitted to BPA as requested, and the FY 2009 SOW was submitted to BPA.

Red River Riparian Revegetation

Approximately 4 miles of streambank within the Red River Meadow system was planted with native plant species. Wildlife Habitat Nursery (Denny Dawes, owner) supplied all of the plant stock. A total of 5,475 plants were planted along the riparian corridors on the mainstem of Red River (in main meadow reaches).

Specifically species planted were Red-osier Dogwood, Drummond willow, Beaked sedge, Small-fruited bulrush, and Serviceberry.

Red River Narrows Stream & Floodplain Restoration

The Red River Narrows Stream & Floodplain restoration project proposes to treat approximately 2 miles of mainstem Red River for increased habitat complexity and access to a functional floodplain. It was unfortunate that the design lacked some

critical engineering data in order to create a successful construction contract package. This delayed the project by a year since the 08 field season was needed to fill these data deficiencies. The project will be on track for 09 implementation.

Red River Meadow Conservation Easement

The Yellow Book Appraisal was completed this contract year for the Red River Meadow Conservation Easement. This will be used in determining the value of the 270 acres we are trying to secure a conservation easement on. RMEF has been contacted to be the easement holder and they have expressed an interest in partnering with us.

Red River Meadow Property

Monitoring

Road obliteration monitoring was conducted on Phase I & II roads. Results were analyzed and are reported in a Road Decommissioning Monitoring Report. Photo points were established, vegetation plots were taken as well as data collected on stream crossings.

One year post-construction monitoring for the 1709 culvert replacement also occurred. Surveys were conducted in accordance with the "National Inventory and Assessment Procedure for Identifying Barriers to Aquatic Organism Passage at Road-Stream Crossing" prepared by the USFS in 2003 as well as our NPT monitoring protocol.

Automatic temperature loggers are deployed each year at various locations within the Red River watershed by the Forest Service. The temperature loggers were placed at the same location as they have been in past years to accommodate repetition in data collection. The automatic recorders were collected from the field in October 2007. Data was downloaded to a computer and summarized in the monitoring report.

Discussion

There were several setbacks this contract year. The first being the delay of the Red River Narrows stream restoration project. While we were disappointed that it has been delayed, we will end up with a better contract package to implement hence better results for our effort.

The Red River Meadow Conservation Easement has been progressing, still slowly but surely. While all parties involved are eager and interested to proceed, we have been stalled a bit by BPA in getting the appraisal approved. Once we have an approval for the appraisal we can secure partners and hopefully proceed quickly from that point.