

# SQUAW CREEK WATERSHED PROJECT -- Anadromous Portion

9506000

## SHORT DESCRIPTION:

A portion of \$ for this project will come from the anadromous program in FY98. Refer to 9506001 for descriptive information. In FY99 and beyond, funding will come from wildlife. Apply a watershed protection, restoration and management approach to the Squaw Creek sub-watershed to maximize long term benefits to wildlife and anadromous and resident fish habitat.

## SPONSOR/CONTRACTOR: CTUIR

Confederated Tribes of the Umatilla Indian Reservation  
Carl Scheeler  
541/278-5268

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## GOALS

### NPPC PROGRAM MEASURE:

7.6A, 7.6C, 7.8E

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## BACKGROUND

### HISTORY:

The Project was prioritized for protection and enhancement under the Umatilla River Basin Anadromous Fish Habitat Enhancement Project, 87-100-01 with an emphasis on its natural production potential for anadromous and resident fish. In 1991 a cultural resources survey of fourteen spring sites was conducted as a precursor to spring development and protection efforts. Additionally, fish habitat surveys were conducted and baseline water quality data collected under this project.

Physical and biological surveys (Juvenile abundance/distribution, pre-spawning surveys and redd counts) were conducted under the Umatilla Basin Natural Production Research Project to document natural production success and related habitat conditions in the sub-watershed.

The CTUIR implemented a big game forage enhancement project in cooperation with private landowners, the Oregon Department of Fish and Wildlife, and the Rocky Mountain Elk Foundation in the Fall of 1995 to improve big game forage conditions in the Squaw Creek area. The project included aerial application of fertilizer and distribution of salt to improve elk distribution. In severe winters, the Umatilla Indian Reservation winters several thousand elk from surrounding big game units in the Blue Mountains which trigger depredation complaints from private landowners on reservation. The Squaw Creek fertilization and salting project is the first of several planned for implementation in the Blue Mountain foothills.

The CTUIR Wildlife Program is currently in the process of facilitating the development of multi-agency plan to improve and promote the condition and distribution of native plant communities and cover/forage conditions for big game and other wildlife. Additional management activities in adjacent drainages on National Forest system lands include salvage timber harvest, prescribed underburning, and implementation of access and travel management plans.

A wildlife mitigation project in the Squaw Creek corridor would be one component of a broader effort by the CTUIR, Forest Service, private landowners, and other organizations regarding development and implementation of projects to improve natural ecosystems in the Blue Mountains. The goal for this project area would be to promote stewardship and watershed restoration efforts through purchase of easements on range units administered by the Bureau of Indian Affairs, acquisition of fee title on available lands, and development of cooperative efforts between the Tribes, federal and state agencies, and private landowners.

### BIOLOGICAL RESULTS ACHIEVED:

Successful reintroduction of Chinook and Coho salmon with documented natural production.

**PROJECT REPORTS AND PAPERS:**

Contractor submits annual project reports for each project listed above. Project identified in the Wildlife Mitigation Plan for the John Day and McNary Dams, CTUIR March 1996.

**ADAPTIVE MANAGEMENT IMPLICATIONS:**

Monitoring and evaluation of the species and habitat responses will be used to direct future management actions within the framework of a Management Plan/NEPA document prepared by the CTUIR and BPA to assure benefits from efforts expended. Squaw Creek sub-watershed currently shows the highest use for spawning of native summer steelhead. However rearing habitat to sustain this production and the documented rearing of Chinook and Coho salmon is lacking. Overall increased anadromous and resident fish productivity resulting from this project will enable managers to better achieve Umatilla Basin fisheries restoration objectives.

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**PURPOSE AND METHODS**

**SPECIFIC MEASUREABLE OBJECTIVES:**

The Squaw Creek Planning Area includes approximately 10,000 acres located entirely within the Squaw Creek sub-watershed, a tributary of the Umatilla River. The area contains critical big game winter range with native bunchgrass plant communities, stringer timber stands, and high quality riparian habitat along Squaw Creek. The area provides habitat for Rocky Mountain elk, mule deer, white-tailed deer, black bear, cougar, raptors, beaver, primary and secondary excavators and various other forest ecosystem species including several species of threatened, endangered, and sensitive fish, wildlife, and plant species. Squaw Creek contains particularly important salmonid spawning and rearing habitat with a significant spawning population of Umatilla River Basin steelhead and suitable habitat for redband and bull trout. Primary HEP indicator species benefited include: mink, California quail, and downy woodpecker, Spotted sandpiper, Western meadowlark, Yellow warbler, Black-capped chickadee and Great blue heron. Project would permanently protect over eight miles of anadromous and resident fish habitat and over eight thousand acres of terrestrial wildlife habitats.

**CRITICAL UNCERTAINTIES:**

Adequate funding for acquisitions and cooperative agreements, operation and maintenance, monitoring and evaluation and enhancements. A critically impacted life history stage currently affecting the natural productivity of anadromous and resident fisheries is juvenile rearing. This and other projects (listed above) addressing additional life history stages will be necessary to implement a comprehensive Umatilla Basin fish restoration program.

**BIOLOGICAL NEED:**

Restore/mitigate for wildlife habitats impacted by the construction and subsequent reservoir inundation of the John Day and McNary Hydro Facilities as documented in the NPPC Wildlife Program’s Losses Assessments and mandated by the Pacific Northwest Power Planning and Conservation Act of 1980.

The current factor limiting anadromous and resident fish productivity in the Umatilla Basin is summer/fall rearing habitat. Due to the high level of anadromous spawning in Squaw Creek, restoration of this watershed represents an ideal opportunity to meet the biological rearing need (egg deposition to smolt). Project will benefit multiple species (Steelhead, Coho, Chinook, Bull Trout, resident rainbow, Whitefish, lamprey).

**HYPOTHESIS TO BE TESTED:**

Enhancement and protection of wildlife and fish habitats in a watershed context will optimize benefit to anadromous and resident fish and wildlife populations in a cost effective manner.

**METHODS:**

Permanent protection of habitat resources in the watershed will be accomplished through the purchase of private lands, acquisition of grazing leases on Indian Trust lands, development of cooperative agreements with private and corporate land owners, coordination with adjacent Federal and State land managers, and through the commitment of Tribal trust lands to the purposes of the project in perpetuity.

Enhancements will target construction of fencing to control livestock access and restoration of native plant communities to provide for a self sustaining restoration of the watershed. Physical factors which limit fish production capability will be addressed through enhancement of overall watershed conditions including upland, riparian and instream habitats.

For additional information pertaining to planning and implementation of this wildlife/fish mitigation project, Please see: Confederated Tribes of the Umatilla Indian Reservation Wildlife Mitigation Plan for the John Day and McNary Dams - Draft for Public Comment, March 1996.

## PLANNED ACTIVITIES

### SCHEDULE:

<u>Planning Phase</u>	<u>Start</u> 1997	<u>End</u> 1997	<u>Subcontractor</u>
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**Task** Secure option for acquisition on approximately 7000 acres of private lands within the basin. Purchase grazing permit for 1997-2001 for all trust lands within the basin not owned by the CTUIR. Incorporate management of 975 acres of Tribal trust lands in the basin into project. Develop cooperative management agreements, leases and easements for private lands in the basin. Conduct HEP analysis of project and complete site specific management plan.

<u>Implementation Phase</u>	<u>Start</u> 1998	<u>End</u> 2001	<u>Subcontractor</u>
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**Task** Acquire 7000 acres optioned in 1997. Construct boundary fencing to control livestock access to the project area. Implement management plan including native plant community restoration, instream habitat protection measures, livestock access management etc. }

### PROJECT COMPLETION DATE:

2000

### CONSTRAINTS OR FACTORS THAT MAY CAUSE SCHEDULE OR BUDGET CHANGES:

None identified. Project should result in improved fish and wildlife habitat within the project area basin with downstream benefits for cold water aquatic species.

## OUTCOMES, MONITORING AND EVALUATION

### SUMMARY OF EXPECTED OUTCOMES

#### Expected performance of target population or quality change in land area affected:

Cost efficient and effective mitigation of wildlife and anadromous and resident fish habitats in an integrated watershed context as guided by the CTUIR Wildlife Mitigation Plan for John Day and McNary Dams and the Umatilla Fisheries Restoration Plan and CTUIR Salmon Policy.

#### Contribution toward long-term goal:

Riparian dependent species.

### MONITORING APPROACH

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## RELATIONSHIPS

### RELATED BPA PROJECT

8802200 Umatilla Basin Trap and Haul Program

9101400 Umatilla Hatchery Satellites-design and Construction

8343500 Umatilla Hatchery Satellite Facilities O&M

8403300 Umatilla Hatchery O&M

9000501 Umatilla Basin Monitoring and Evaluation Program

8710001 Umatilla River Basin Anadromous Fish Habitat Enhancement

9506000 Umatilla River Riparian Corridor Coordination

### RELATIONSHIP

Other related projects comprising a comprehensive Umatilla Basin fisheries restoration program.

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Evaluated natural production success of reintroduced anadromous and resident fish in the Umatilla Basin including Squaw Creek.

Basin wide anadromous fish habitat protection and restoration effort guided by the Umatilla River Drainage anadromous Fish Habitat Improvement Implementation Plan (Reeve, et. al. 1988). Prioritized Squaw Creek for protection and enhancement and focused monitoring and evaluation efforts within this proposed project area.

Basin wide mitigation planning and coordination contract for CTUIR wildlife mitigation effort. Identified, integrated and prioritized mitigation projects in the CTUIR ceded territory. Integrated mitigation efforts in Oregon with CTUIR's mitigation effort under the Interim Washington Wildlife Mitigation Agreement.

### **OPPORTUNITIES FOR COOPERATION:**

This project represents a unique opportunity to combine objectives and funding sources of wildlife, resident fish and anadromous fish to accomplish a common restoration objective in a watershed context. Depends on the BPA's Programmatic EIS for Wildlife Mitigation in the Columbia Basin for programmatic (non-project specific) issues. Depends on successful negotiation for acquisition of the dominant private inholdings within the project area. Also see project history.

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## COSTS AND FTE

**1997 Planned:** \$1,500,000

### **FUTURE FUNDING NEEDS:**

<u>FY</u>	<u>\$ NEED</u>	<u>% PLAN</u>	<u>% IMPLEMENT</u>	<u>% O AND M</u>
1998	\$500,000		0%	0%

### **PAST OBLIGATIONS (incl. 1997 if done):**

<u>FY</u>	<u>OBLIGATED</u>
1995	\$64,258
1996	\$132,000

TOTAL: \$196,258

Note: Data are past obligations, or amounts committed by year, not amounts billed. Does not include data for related projects.

