Project Number	2008-207-00, CTUIR Ceded Area Priority Stream Corridor Conservation and Protection (Umatilla Tribe Protection and Capital Acquisition)
Proposer	Confederated Tribes of the Umatilla Indian Reservation
Short Description	The project focuses on securing permanent protection of priority anadromous fish core habitats in the Grande Ronde, Umatilla, Walla Walla and John Day River watersheds through conservation easement and capital acquisition of fee title. Continued pressure from development and commodity based resource management threatens to seriously degrade watershed productivity and function.
Province(s)	Columbia Plateau, Blue Mountain
Subbasin(s)	Grande Ronde, Umatilla, Walla Walla, John Day
Contact Name	Carl A. Scheeler
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Information transfer:

A. Abstract

The CTUIR Ceded Area Priority Stream Corridor Conservation and Protection Project is an effort led by the CTUIR in cooperation with other conservation partners to secure permanent protection for core anadromous fish habitat areas in the ceded territory of the CTUIR. This includes the river corridors and watersheds of the Grande Ronde, Umatilla, Walla Walla and John Day Rivers. Protection and long term conservation of core fish and wildlife habitats is crucial piece of a comprehensive strategy to maintain productive naturally producing native fish and wildlife populations. Anadromous fish production in these watersheds is depressed due to past and ongoing land management actions and numerous stocks are listed for protections under the Endangered Species Act. Ongoing commodity driven management and land subdivision and development pressures jeopardize future habitat function and connectivity. The project focuses on prioritizing lands for fee title acquisition or purchase of permanent conservation easements that would assure future development and management would maintain or enhance fish and wildlife habitat capability. Conservation lands would establish opportunities for habitat restoration efforts with persistent benefits. The project relies heavily on individual subbasin plan Ecosystem Diagnosis and Treatment (EDT) or Qualitative Habitat Assessment (QHA) modeling to direct specific conservation actions to optimize benefits to anadromous fish. Conservation opportunities are evaluated and prioritized using criteria that: protect high value habitats or habitats with high restoration potential consistent with subbasin plan priorities and Comprehensive State Wildlife Conservation strategies; benefit ESA species and multiple species and life stages; are defensible relative to size, configuration and adjacent threats; enhance connectivity; and logistically benefit existing conservation areas. The acquisition process will follow that established in the CTUIR's Land Acquisition Program to coordinate the acquisition of property and ensure due diligence and consistency with CTUIR land and resource management goals.

B. Problem statement: technical and/or scientific background

The river corridors of the Grande Ronde, Umatilla, Walla Walla and John Day River watersheds provide important habitat for a variety of fish and wildlife species, many of which are federally listed and of cultural significance and economic importance to the Confederated Tribe of the Umatilla Indian Reservation (CTUIR) and other residents of the Northwest. These watersheds historically supported far more robust and diverse populations of anadromous and resident salmonid and Pacific lamprey than they do today. Historic and ongoing land use patterns within the watersheds and prior channel and flood plain engineering projects have reduced the quantity and quality of habitat capable of supporting natural populations of fish and wildlife. Further, these same actions have compromised the ecological function and the connectivity and natural exchange of water, sediment, nutrients, and carbon between the watershed, flood plain and river channel.

Past survey of riverine habitats and the Ecosystem Diagnosis and Treatment (EDT) or Qualitative Habitat Assessment (QHA) modeling conducted for the Northwest Power and Conservation Council's (NPCC) subbasin planning process have documented a loss of aquatic habitat capability and identified priority reaches for conservation and restoration efforts in these watersheds. Additionally, research in the Umatilla Basin (K. L. Jones, et al. 2008) has demonstrated that areas with high levels of hydrologic connection between the river channel and flood plain have a profound influence on the water temperature in the river. The complex geomorphology in these areas promotes the exchange of ground and surface water, thereby cooling the river, and creating cold water refuges exploited during the hot summer months by anadromous and resident salmonids and resident char (bull trout). As a result, areas of the flood plain that have not been affected by human land use or channel engineering and are still accessible to native fish and wildlife have become a high priority for conservation as core fish and wildlife habitat. This strategy of protecting the best existing habitats tends to focus conservation efforts in the headwaters where cumulative downstream benefits maximize net benefits to fish production in the watershed.

Important core habitats in the Grande Ronde, Umatilla, Walla Walla and John Day River watersheds are under continued pressure for subdivision, development and commodity driven resource management that threaten both their short and long term productivity Once lands are subdivided and developed, the cost of restoration and conservation is greatly magnified and the overall effectiveness of such efforts reduced. Assuring the conservation and appropriate long term management of these lands is crucial piece of a comprehensive strategy to maintain productive naturally producing native fish and wildlife populations.

The CTUIR conduct habitat acquisition, protection, and restoration for the benefit of impacted fish and wildlife including threatened, endangered, sensitive, and other fish and wildlife species of concern. Fee title acquisition is often the most cost-effective, long term approach to protecting habitat values and establishing opportunity for restoration with persistent benefits. In a study comparing fee title acquisition and easements, Prose et al (1986) concluded that "Fee title land acquisition and subsequent management generally is more cost-effective than easements." Wildlife agency acquisition specialists have also consistently found that fee title acquisition of land for habitat protection is usually more economical in the long-term (Oregon Trust Agreement Planning Project, BPA et al., 1993). However, where acquisition of fee title is not an option, purchase of a permanent conservation easement can provide for significant resource protection and restoration opportunity.

Habitat

Protection and long term conservation of core fish and wildlife habitats is crucial piece of a comprehensive strategy to maintain productive naturally producing native fish and wildlife populations. This broad strategy is capable of contributing to meeting all of the biological habitat objectives identified in NPCC subbasin plans and NOAA recovery plans. Many objectives are likely to be met just by habitat protection and the associated natural recovery of upland and/or riparian areas as causative factors impacting habitat are addressed. Land acquisitions, easements, and cooperative agreements may also facilitate the implementation of active restoration projects by securing restoration opportunities in priority stream reaches within the subbasins. The specific objectives addressed by each protection effort will vary, and must be assessed on a case-by-case basis. Each subbasin plan has identified habitat protection priorities based on EDT modeling and other appropriate considerations. Additionally, the CTUIR has developed project selection criteria to guide identification and prioritization of protection projects within these modeled priority areas. These criteria were developed collaboratively with tribal and model watershed staff in consultation with BPA through review of subbasin and recovery plan priorities.

Project Prioritization Criteria for 2008-207-00, CTUIR Ceded Area Priority Stream Corridor Conservation and Protection (capital acquisition)	
1. Consistency with subbasin plan priorities, NOAA /USFWS Recovery Plans and Comprehensive State Wildlife Conservation Strategies. • Identified through EDT, QHA or similar analysis as high priority for conservation and supporting an ESA listed population critical to maintenance of ESU/DPS viability. (3pts) • Identified through EDT, QHA or similar analysis as high priority for restoration and supporting an ESA listed population critical to maintenance of ESU/DPS viability. (2pts) • Identified as either high priority for conservation or restoration through EDT, QHA or similar analysis or containing significant priority habitats (1pt)	**Score**
2. Multiple species and/or life stage benefits. • Contains a significant portion of the spawning and rearing habitats for distinct populations of two or more species (3 pts) • Contains a limited portion of the spawning and rearing habitats for distinct populations of two or more species **or** Contains a significant portion of either the spawning or rearing habitats for a distinct population of two or more species **or** Contains a significant portion of both spawning and rearing for a distinct population of one species. (2pts) • Contains a limited portion of the spawning and rearing habitat for a distinct population **or** Contains a limited portion of spawning or rearing of multiple distinct populations. (1 pt)	
3. High degree of defensibility relative to size and configuration of acquisition tract and adjacent threats. • High probability of long term defense of conservation values (+1 pt) • Limited potential for significant or long term loss or extensive short term loss of conservation values (-1 pt) • Significant potential for limited long-term or extensive short term loss of conservation values (-2pts) • Significant potential for extensive long-term loss of conservation values (-3pts)	
4. Direct enhancement of connectivity between conservation areas. • Significance of enhancement to functional connectivity between protected areas or extension of protected area corridor including opportunities for improving instream flow conditions or restoring migratory pathway connections (consider distance/magnitude of established connectivity, total area/length of connected protected areas, etc) (1-3 pts)	
5. Enhancement of administrative or logistics associated with management of existing adjacent conservation areas. • Addresses significant or critical logistical or administrative issue (+1-3 pts) • Includes characteristics that could create logistics or administrative problems (-1-3pts)	

C. Rationale and significance to regional programs

Relationship to the Columbia Basin Accords

The primary focus of the Columbia River Basin Accords was an increase in funding for habitat protection and restoration. This project represents the CTUIR's primary project for providing permanent conservation of habitats under the Accords.

Relationship to the NPCC Subbasin Plans and NOAA recovery plans

Permanent conservation actions implemented under this project contribute directly to the vision of the NPCC Fish and Wildlife Program by protecting regionally important and critical fish and wildlife habitat in the Umatilla, Walla Walla, Grande Ronde, and John Day River subbasins. These actions also contribute to the overall Columbia River Basin effort of protecting and enhancing ecosystems that sustains an abundant, productive, and diverse community of fish and wildlife through mitigating across the basin for the adverse effects to fish and wildlife caused by the development and operation of the Federal hydrosystem and providing benefits for fish and wildlife valued by the people of the region (NPCC, 2000).

The Umatilla/Willow Subbasin Plan (DeBano et al, 2004) identified priority geographic areas for protection focusing on areas that the EDT analysis suggests would have the most negative impacts on the focal species if they were allowed to degrade further. Within protection areas, actions appropriate to secure protection and/or avoid degradation including conservation easements and other agreements that secure the protection of the stream and riparian zone for a significant period of time. Likewise, the Walla Walla Subbasin Plan (Walla Walla Watershed Council et al, 2004) conclude that where specific reaches or segments of stream reaches have high value due to their current productive capacity or general importance to particular species, they should be protected to maintain their value.

The John Day Subbasin Plan (Columbia-Blue Mountain RCD, 2005) identifies the protection of existing high quality habitat areas as a broad strategy capable of contributing to meeting all of the biological habitat objectives identified in the plan, with many objectives likely to be met just by habitat protection and the associated natural recovery of upland and/or riparian areas. Land acquisitions, easements, and cooperative agreements were identified as tools to facilitate the implementation of active restoration projects. Many areas in the John Day Subbasin currently provide high quality fish and wildlife habitat and/or are expected to do so in the near future given continuation of current management direction. Protecting these areas from deleterious changes was seen as an essential part of maintaining and improving fisheries habitat in the subbasin.

The Upper Grande Ronde River is the highest priority for conservation within the ceded area with a special focus on Spring Chinook spawning and rearing habitats. The Grande Ronde Subbasin Plan sets goals for protection of high quality habitats and for providing connectivity between functioning habitats (Nowak, 2004). EDT modeling for Upper Grande Ronde River Spring Chinook Salmon identified the highest priority area for protection and restoration as the upper Grande Ronde from Meadow Creek to Limber Jim.

In both the Oregon Department of Fish and Wildlife's and NMFS's recovery plans for Mid-Columba (2008) the integrated approach to address threats and factors limiting recovery of Oregon's Middle Columbia River steelhead populations identifies protecting the highest quality habitats through acquisition and conservation as the first action under the strategy to "Protect and conserve natural ecological processes that support viability of populations and their live history strategies throughout their life cycle."

The Draft Oregon Snake River Recovery Plan (April 8, 2008 Draft) identifies the conservation of the existing quality habitat that supports core production and primary life history types, as well as quality migration habitats within populations and across the DPS, is the critical first step toward recovery.

Supporting Document Source	Page	Section
Grande Ronde Subbasin Plan	258	*5.2.1.1 Goal for aquatic habitats*
Draft Oregon Snake River Recovery Plan (April 8, 2008 Draft)	9-1	Section 9: Actions 9.1 Strategic Guidance for Prioritizing and Implementing Recovery Actions
	9-3	9.2 Tributary Habitat Actions
Umatilla/Willow Subbasin Plan (May 28, 2004)	5-40	5.3.2.3 Areas for Protection
John Day River Subbasin Plan (May 2004)	270	Links between this Strategy and Habitat Objectives Identified in the Plan. Strategy G: Protect Existing High Quality Habitat Areas Overview.
	272	Figure 57. Priority Strategy G: Protect Existing Habitats (Map illustrating relative priority for protecting high quality habitat by HUC5)
Walla Walla Subbasin Plan (May 2004)	60	Figure 3-6 Priority Protection and Restoration Geographic Areas
	62	Priority Areas for Protection from EDT Analysis
Final Addendum to the Walla Walla Subbasin Plan (November 2004)	6	1.1.5.3 Habitat Habitat Scenario H-4: Protect High Quality Habitat
NOAA Fisheries Middle Columbia Steelhead ESA Recovery Plan (September 2008)	7-3 7-33	Integrated approach to address threats and factors limiting recovery
Conservation and Recovery Plan for Oregon Steelhead Populations in the Middle Columbia River Steelhead Distinct Populations Segment (November 2008)		Table 1-5 Integrated approach to address all factors limiting recovery of Oregon's Mid-C steelhead populations.
		Table 1-10 Summary of Recovery information for the North Fork John Day River Population (Tributary Management Strategy: Highest Priority *Key Action-protect highest quality habitat)*
		Table 1-11 Summary of Recovery Information for Middle Fork John Day River Population(Tributary Management Strategy: Highest Priority *Key Action-protect highest quality habitat)*
		Table 1-14 Summary of Recovery Information for Umatilla River Populations (Tributary Management Strategy: Highest Priority *Key Action-protect highest quality habitat)*
		Table 1-15 Summary of Recovery Information for Walla Walla River Population(Tributary Management Strategy: Highest Priority *Key Action-protect highest quality habitat)*

Guidance from these documents and plans were an integral part in focusing and prioritizing the CTUIR's Land Acquisition program. Through use of these plans, acquisitions and/or conservation easements will be focused on properties that can bring about the greatest benefit for species and promote healthy watersheds.

D. Relationships to other projects

Funding Source	Project #	Project Title	Relationship (brief)
BPA	199608300	CTUIR Grand Ronde Subbasin Restoration Project	Subbasin habitat enhancement and restoration program to complement protections and conservation efforts of the Ceded Area Priority Stream Corridor Conservation and Protection Project.
BPA	198710001	Umatilla Anadromous Fish Habitat - CTUIR	Subbasin habitat enhancement and restoration program to complement protections and conservation efforts of the Ceded Area Priority Stream Corridor Conservation and Protection Project.
BPA	199604601	Walla Walla River Basin Fish Habitat Enhancement	Subbasin habitat enhancement and restoration program to complement protections and conservation efforts of the Ceded Area Priority Stream Corridor Conservation and Protection Project.
BPA	200003100	North Fork John Day Basin Anadromous Fish Habitat Enhancement Project	Subbasin habitat enhancement and restoration program to complement protections and conservation efforts of the Ceded Area Priority Stream Corridor Conservation and Protection Project.
BPA	199506001	Iskuulpa Watershed Project	Existing BPA funded conservation area inclusive of priority anadromous fish habitats.
BPA	200002600	Rainwater Wildlife Area	Existing BPA funded conservation area inclusive of priority anadromous fish habitats.

Since 1997, the CTUIR Fish and Wildlife Programs have purchased and protected 21,491 acres of fish and wildlife habitat within the Tribe's 6.4 million acre Ceded Area, with over 7000 acres located within the Umatilla Indian Reservation bounds. The focus of acquisitions has been watersheds or floodplains providing habitat for Threatened summer steelhead, Threatened bull trout, reintroduced Chinook and Coho salmon, and selected terrestrial wildlife indicator species. The primary acquisition funding source has been Bonneville Power Administration Fish and Wildlife Mitigation funding, NOAA's Pacific Coastal Salmon Recovery Funds through the Columbia River Inter-Tribal Fish Commission and CTUIR funds. Land acquisition, augmented by Tribal jurisdiction of zoning and land use regulations, affords the opportunity to strengthen natural resource protection both within the Reservation boundary and across the ceded territories.

Additionally, the CTUIR implements comprehensive anadromous fish restoration efforts in the watersheds of the ceded territories. These efforts include hatchery, habitat, passage and research projects aimed at protecting and restoring treaty reserved fish and wildlife resources. All projects associated with this effort could be considered to have a director or indirect relationship with this project. In the interest of brevity, we will not list them all. Please refer to NPCC subbasin plans for complete overviews of each basin effort.

E. Proposal biological/physical objectives, work elements, methods, and metrics

***Objective* – Protect Functional Habitat from Degradation Threats and establish opportunity for restoration and enhancement.**

Desired outcome – Permanent protection of core anadromous fish habitats and associated riparian and upland habitats.

Work Elements and associated milestones, methods, metrics and deliverables-

a) Identify and Select Projects (WE: 114)

Milestones

i) Identify, prioritize, assess and select acquisition project areas
ii) Coordinate prioritized projects with partners

Environmental Compliance: National Environmental Policy Act (NEPA)
NEPA coverage for this work element will be identified by BPA's Environmental Compliance Lead.

Metrics: *No metrics needed*

Deliverables: Establishment and maintenance of a prioritized list of potential alternative projects

b) Provide Technical Review Planning and Coordination (WE: 122)

Milestones

i) Develop project acquisition proposal for priority project(s)
ii) Review and coordinate priority projects with BPA

Metrics: *No metrics needed*

Deliverables: Completed project proposal

c) Conduct pre-acquisition activities (WE: 172)

Milestones

i) Establish relationship with landowner
ii) contract with qualified appraiser to establish fair market value

iii) perform title search
iv) survey lands to be protected and create legal description
v) negotiate acquisition or terms and extent of conservation easement with landowner
vi) draft legal agreement, grant deed of conservation easement
vii) coordinate all pre-acquisition procedures with BPA to assure compliance with federal laws and guidelines.
viii) assign or record with deed BPA's third party rights to enforce easement or covenant for acquired properties.

Methods: The CTUIR has established a Land Acquisition Program to coordinate the acquisition of property and ensure consistency with CTUIR land and resource management goals. A Land Acquisition Committee (LAC) serves as the facilitator for land acquisition by conducting or coordinating the following tasks:

1. Develop and Review Acquisition Profile - The LAC reviews the subject property acquisition profile, including property description, relationship to Tribal land acquisition strategies, technical checklist, and appropriate financial programs supporting the acquisition.

2. Request Appraisal - If the LAC determines the property is consistent with Tribal goals and funding sources, the LAC requests an appraisal consistent with federal standards. The cost of the appraisal is shared between the landowner and CTUIR.

3. Conduct Appraisal –The CTUIR Fish and Wildlife Program will develop a professional services agreement for an appraisal **(to Federal yellowbook standards)** of the subsequent floodplain and upland habitat parcels**.**

4. Secure Title Policy – The title policy is requested from the fee landowner by the CTUIR LAC.

5. Negotiate Sale Price –The completed appraisal is presented to fee title owner and reviewed by the LAC. The LAC or its designee (project lead) and the landowner negotiate a mutually acceptable price based on the appraisal. Not to exceed FMV. BPA to review and approve appraisal.

6. Board of Trustees Review - Following price negotiation, the LAC requests a work session with the CTUIR Board of Trustees (BOT) to review the acquisition package (internal review forms, draft BOT Resolution for purchase, land acquisition profile, copy of title policy, appraisal, maps, and price).

7. Board of Trustees Approval – A minimum of one week following initial BOT review, a final Resolution is prepared for the BOT. The BOT votes on the acquisition resolution, with approval obtained by a simple majority vote of the 9-person Board.

8. Sale Closure – The LAC or its designee conducts coordination of title reports, escrow/closing statements, and recording of covenants for acquired land parcels.

9. Easement rights to BPA. If the CTUIR acquires habitat using a conservation easement, then it will use an easement template agreed to by BPA which will include provisions for BPA to have a third party right of enforcement. If the CITUR acquires habitat in fee, it shall at closing grant BPA a conservation easement over the property.

Metrics: *No metrics needed*

Deliverables: Purchase and Sale Agreement or Draft Deed of Conservation Easement for priority conservation lands

d) Produce Environmental Compliance Documentation (WE: 165)

Milestones

i) Assemble, gather, acquire or prepare documents in support of obtaining environmental compliance from BPA.
ii) Contract with qualified consultant to conduct hazardous waste assessment
iii) Conduct public involvement activities

Metrics: *No metrics needed*

Deliverables:

- Documentation and assistance to support BPA's Environmental Compliance Group
- Environmental Land Audit (ELA)

e) Land purchase (WE:5)

Milestones

i) conveyance of property rights with payment to escrow of sale price
ii) terms of conservation easement take affect, stewardship and monitoring begin

Metrics: *1375 type of acquisition*
1379 miles of riparian protected
1380 number of acres of riparian protected
1445 number of upland acres protected
1446 number of wetland acres protected
1452 amount of water secured in acre-feet/year
1453 flow of water returned to the stream

Deliverables: Conserved priority habitats with recorded deed restrictions

f) Manage and Administer Projects Planning and Coordination (WE: 119)

Milestones

i) Develop statement of work and budget
ii) Conduct financial reporting

Metrics: *No metrics needed*

Deliverables: Statement of work and budget, financial reporting.

g) Produce Pisces Status Report (WE: 185)

Milestone: Report status of milestones and deliverables

Metrics: *No metrics needed*

Deliverables: Quarterly Pisces reports.

h) Produce Annual Progress Report (WE: 132)

Milestones

i) Report status of milestones and deliverables

Metrics: *No metrics needed*

Deliverables: Annual Progress Report.

F. Facilities and equipment

As a full service Tribal Government, the CTUIR possesses a full range of support facilities and services, including both technical and administrative staff. Tribal government offices are located in the Tribal Government Complex near the Umatilla Reservation center where other community facilities are located. The Tribal Fish and Wildlife Department complex contains sufficient office space for existing and future professional and management staff, a fully equipped secretarial services center, a conference/meeting room, library, and supply storage space. Administrate support services available from the tribe include budget tracking and compliance, legal review, and purchasing. CTUIR has an excellent GIS department, which provides assistance and technical support for GPS equipment and GIS software. GIS staff is capable of completing complex spatial tasks such are satellite image interpretation and mapping. Database managers are also available to assist with data management and integration, and web site development. Tribal offices are electronically interconnected through a LAN network and feature modern personal computer workstations. Current software capabilities include extensive word processing, spreadsheet, data base development and management, and GIS (ArcGIS) capabilities. General Service Administration (GSA) vehicles (primarily 4X4 trucks) and all terrain vehicles and trailers are available to wildlife program staff. Field and sampling equipment is available for data collection and management in support of evaluation and monitoring efforts. CTUIR is also developing a native plant nursery. The nursery can collection and propagate native plants needed for revegetation projects. This capability allows plant sources from on or near project sites to be used in revegetation, ensuring the materials are locally adapted to the site.

I. References

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Nowak, M. C.. 2004. Grande Ronde Subbasin Plan. Northwest Power and Conservation Council.

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Prose, B., Farmer, A., and Olson, R. 1986. Cost-effectiveness of Easement and Fee Title Acquisition for Mitigating Wildlife Habitat Losses. USDI, Fish and Wildlife Service, National Ecology Center. Fort Collins, Colorado. 61pp

U.S. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife, Oregon Department of Fish and Wildlife, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Indian Reservation, Burns Paiute Tribe, Oregon Natural Heritage Program, U.S. Fish and Wildlife Service. 1993 Oregon Trust Agreement Planning Project. 53 pp.

Walla Walla Basin Watershed Council and Walla Walla County. 2004 Nov. Walla Walla Subbasin Plan. Northwest Power and Conservation Council.

J. Key personnel

CTUIR Department of Natural Resource staff funded under this project are professionally trained and meet standard job descriptions (professional and technical grade and series requirements) established under the CTUIR Personnel Policy and Procedures Manual. Following is a summary of key staff experience.

Name: Carl A. Scheeler .2 FTE/408 hrs

Title: Wildlife Program Manager, DNR

Project Responsibilities: Project Leader for 2008-207-00, CTUIR Ceded Area Priority Stream Corridor Conservation and Protection. Project administration, coordination and implementation.

Education: BS Wildlife, 1985. Oregon State University
AS Recreation and Parks Management, 1977-1979 Northern Virginia Community College.

Current Position: Confederated Tribes of the Umatilla Indian Reservation, Wildlife Program Manager (1994 to present) Responsibilities include all aspects of project and program development and management and wildlife policy analysis for tribal government. Lead land conservation staff for DNR.

Past Employment:

Confederated Tribes of the Umatilla Indian Reservation.

Wildlife Biologist (1992-1994) Lead Tribal wildlife biologist on Umatilla Indian Reservation responsible for collection and analysis of data on wildlife resources, review and comment on federal, state and local government actions affecting treaty reserved natural resources, analysis of big game, upland game and waterfowl habitat and population issues including hunting seasons, habitat analyses, and development of habitat restoration and enhancement projects, coordination with other Tribal DNR Programs, Tribal Departments, and Policy Committees and Commissions and conveyance of Tribal policies and regulations regarding management of the Treaty reserved wildlife resources to local, state and federal agencies with resource management responsibilities in the areas of interest and influence of the CTUIR.

Fish Habitat Biologist (1988-1992). Responsible for the coordination and implementation of fish and riparian habitat improvement projects on the Umatilla Indian Reservation. Project leader for BPA funded anadromous fish habitat enhancement program including all aspects of program and project planning, development, coordination and implementation. Development of fish habitat protection and enhancement strategies throughout the Tribes ceded territories in Southeast Washington and Northeast Oregon. Conducted physical and biological surveys on high priority anadromous fish habitats on and adjacent to the Umatilla Indian Reservation. Developed contracts, landowner agreements and equipment specifications required for implementation of enhancement activities. Conducted technical review of all Tribal stream zone alteration and fill and removal permits. Supervised technical and professional staff in the collection and analysis of data and the implementation of habitat restoration measures.

USDA Forest Service, Umatilla National Forest North Fork John Day Ranger District

Fisheries Biologist (1986 – 1988) Participated in interdisciplinary team analyses of a variety of land and resource management projects ensuring consistency with the NEPA, National Forest Management Act, Endangered Species Act, and other state and local laws and regulations governing natural resource management on national forest lands. Developed and implemented anadromous fish habitat enhancement projects funded through the NWPPC Fish and Wildlife Program. Conducted physical and biological surveys in aquatic and riparian habitats. Supervised seasonal field technicians in data collection and restoration actions

Oregon State University Cooperative Park Study Unit

Research Assistant (1984-1986) Conducted field studies in cooperation with the National Parks Service (NPS) on big game habitat use. Studied the effects of herbivory on the growth of browse species in Olympic National Park. Collected and prepared vegetative samples for lab analysis. Monitored the growth of four key browse species along transects inside and outside herbivore exclosures. Used radio telemetry from ground and aircraft to locate radio collared elk. Collected data on herd composition, home range and habitat selection. Prepared cover type maps from aerial photos and in field sampling. Developed data files for analysis.

Name: Allen Childs .1 FTE/204 hrs

Title: Fish and Wildlife Biologist III-project leader Grande Ronde Basin Habitat

Project Responsibilities: Basin specific input to project selection and coordination.

Education: BS Biology/Wildlife Management 1985-89 Eastern Oregon University
AS Range Ecology 1985 College of Eastern Utah;

Current position: Confederated Tribes of the Umatilla Indian Reservation. Fish and Wildlife Biologist III (1993- present). Lead project biologist for development and implementation of Tribal Columbia Basin Wildlife Mitigation Projects and CTUIR Grande Ronde Subbasin Restoration Project. Responsibilities include: identification of and development of project opportunities, land acquisition, management plan development, baseline resource assessments, field surveys, monitoring and evaluation, environmental compliance (NEPA/SEPA, ESA consultation, hydraulic/fill-removal permits, State Forest Practice Act permits, etc), restoration designs and implementation, subcontracting and inspection, and administrative duties.

Past Employment:

USDA Forest Service, Wallowa-Whitman National Forest

Natural Resource Planner/Biologist (1989-1993) Facilitated interdisciplinary team analyses as project leader for a land and resource management projects under NEPA, NFMA, ESA, and applicable laws and regulations. Facilitated environmental planning process and environmental compliance documentation. Processed environmental appeals, prepared appeal records, and documented process.

Recent Publications:

Childs, A. B.; Scheeler, C. A.; Quaempts, E.; and Alexander, R. 1997. Wildlife Mitigation Plan for the John Day and McNary Dams, Columbia River. Basin. Confederated Tribes of the Umatilla Indian Reservation. Prepared for the Bonneville Power Administration.

Childs. A. B. 2002. Revised 2004. Rainwater Wildlife Area Habitat Evaluation Report. United States Department of Energy. Confederated Tribes of the Umatilla Indian Reservation. Bonneville Power Administration, Contract Number 000000515.

Childs, A. B. 2001. Rainwater Wildlife Area Management Plan. Confederated Tribes of the Umatilla Indian Reservation. Bonneville Power Administration, Contract Number 000000515

Name: Eric Hoverson FTE Dependent on Need

Title: Fisheries Habitat Biologist-project leader Umatilla Basin

Project Responsibilities: Basin specific input to project selection and coordination.

Education: BS, Biology, Water Resources Minor, University of Wisconsin Stevens Point 1990
Treehaven Natural Resource Field Station. Resource Management, 8/88

Current position: Project leader for the Umatilla Basin Fish Habitat Enhancement Project since 2006. Duties include all aspects project development, funding, contracts, public outreach, employee supervision, data collection and analysis, and habitat project design and implementation.

Past Employment:

Confederated Tribes of the Umatilla Indian Reservation,

Habitat Specialist (2003-2006) Compose scientific reports**,** conduct Aquatic Habitat Inventories, collect biological data, presentations to AFS level, reporting and grant applications, develop standard operational guidelines, work plans, manage project budget, coordinate with agencies and landowners.

Fisheries Research Biologist 1 (1992-2003), Assess habitat conditions and salmonid capacity, conduct fish salvages, summarize data into technical reports, managerial recommendations, develop work plans, produce deliverables, participate in various working groups, coordinate projects between a multitude of agencies.

United States Army Corps of Engineers

Biological Aid. (3/92-10/92) Independently maintain & improve operations at juvenile salmonid collection facility, develop work plans and detailed reports, provide information to tour groups and assist cooperating agency personnel.

United States Fish and Wildlife Service/ North Carolina State University

Wildlife Research Technician(10/91-3/92) Conduct various studies of waterfowl at National Wildlife Refuge. Collect, proof, and enter data into database, deploy and download acoustic sensory devises, design, supervise and assist graduate students.

Wisconsin Dept. of Natural Resources

Riverway Technician **(**5/91-10/91) Inform public of department policy and objectives, supervise volunteer work crews, maintain of public properties, assist enforcement.

Fish & Wildlife Habitat Technician **(**9/90-1/91) Improve habitat on private and public lands, collect and analyze data, prepare maps and graphics for scientific reports.

Trout Habitat Technician (5/90-9/90) Restore stream habitat utilizing bioengineering methods, removal of undesirable plant species, conduct population surveys, operate heavy equipment, identify areas for future projects, supervise youth crews.

Fisheries Research Assistant (5/89-9/89) Study of predator-prey relationships, relate species abundance to water conditions, enter, proof, compile data into technical research reports.

Certification/Training:

Rosgen 1 & 2, USFWS Stream Restoration, First Aid/CPR (ARC).
Defensive Driving & Safety, Coast Guard Boating, Electrofishing.

Recent publications include:

Umatilla Basin Monitoring & Evaluation Annual Reports 1993-97, 99.
Biological Controls, Improving Water Quality in Lake Mendota, 1989.

Name: Jed Volkman FTE Dependent on Need

Title: Fisheries Habitat Biologist-project leader

Project Responsibilities: Basin specific input to project selection and coordination.

Education: BS Fisheries 1990 University of Idaho
Technical Degree Plant Science 1984, Walla Walla Community College.

Current position: Project leader for the Walla Walla Basin Fish Habitat Enhancement Project since 1996. Duties include all aspects project development, funding, contracts, public outreach, employee supervision, data collection and analysis, and habitat project design and implementation.

Past Employment:

Confederated Tribes of the Umatilla Indian Reservation (1991-1996)
Adult Passage Evaluation-four years as project leader/passage biologist-primary responsibility to evaluate movements of adult salmonids past five diversion dams on the Umatilla River through the use of radio telemetry.

Hanford Reach Project Leader-six years (1 month per year, concurrently with the adult passage project described above) duties include project planning, equipment acquisition/operation and implementation of project on the Hanford Reach of the Columbia River. Goal of the project is to capture of 200,000 juvenile fall Chinook for coded wire tagging

Recent publications include:
Author of 1992-2000 Columbia River Upriver Bright Fall Chinook Salmon Tagging Study to Columbia River Inter Tribal Fish Commission.

Author of 1992-1996 Umatilla River Adult Passage Evaluation Annual reports of progress to Bonneville Power Administration.

Author of 1997-2007, Walla Walla River Basin Fish Habitat Enhancement Annual reports of progress to Bonneville Power Administration.

Contributor to the Walla Walla Subbasin Review submitted to the Northwest Power Planning Council.

Name: John Zakrajsek **FTE Dependent on Need**

Title: Fisheries Habitat Biologist-project leader Umatilla Basin

Project Responsibilities: Basin specific input to project selection and coordination.

Education: M.S. Hydrogeology, University of Idaho, Moscow, Idaho, 2006
B.S. Fisheries Management, University of Idaho, Moscow, Idaho, 1995

Current Position: Project leader, John Day Basin Fish Habitat Enhancement Project since 2007. Coordinate and direct project development and implementation for cooperative habitat restoration efforts within the North Fork John Day River Basin. Develop and maintain relationships leading to cooperative restoration projects on private and public lands. Serve as a board member for the North Fork John Day Watershed Council.

Nez Perce Tribe Department of Fisheries

Fisheries Biologist (2001-2004) Monitoring and Evaluation activities for the tribal hatchery including characterizing and monitoring stream and riparian habitat and aquatic populations, water quality monitoring and analysis, data management and analysis, developing reports and presentations, project administration and personnel management.

Fisheries Biologist (1998-2000) Research activities for a Westslope Cutthroat Trout hybridization study including characterizing and monitoring stream and riparian habitat and aquatic populations, data management and analysis, developing reports and presentations, and project and personnel management.

NWO Inc.

Biologist (1996–1998) Identify appropriate data collection protocol and sampling the catch on fishing vessels and processing plants in the Bering Sea.

PUBLICATIONS:
Fairley, J.P., Zakrajsek, J.R., A Physical Anti-Alias Filter for Time-Series Temperature Measures, Ground Water Monitoring and Remediation, 27(1), 1-5..