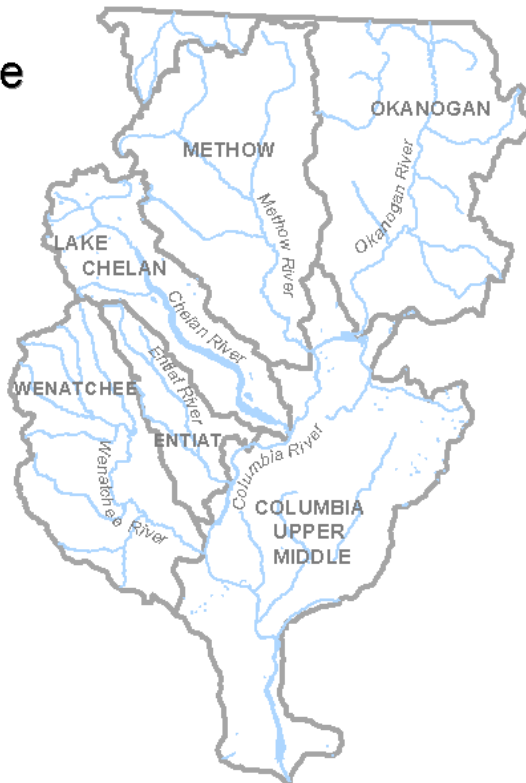
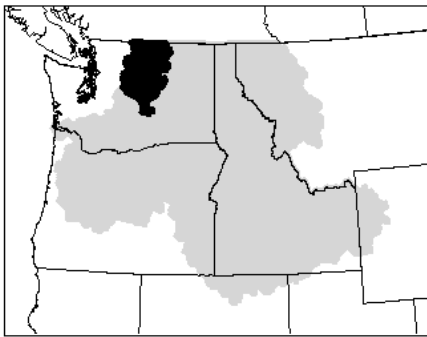


Draft FY 2003-2005 Columbia Cascade Province Work Plan

Columbia Cascade Province



**Prepared for the
Northwest Power Planning Council**

**by the
Columbia Basin Fish and Wildlife Authority**

May 17, 2002

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Background

The construction and operation of hydroelectric facilities on the Columbia River have heavily impacted the fish and wildlife populations of the Columbia Cascade Province. Three major hydroelectric projects have been constructed within the province; Rock Island Dam, completed in 1932 provided anadromous salmonid adult fish passage. In 1961 and in 1967, Rocky Reach and Wells hydro-projects were completed (respectively), both with effective adult passage facilities.

Construction of Grand Coulee Dam in 1934 blocked over 1,000 miles of habitat in the upper Columbia River Basin upstream of the Columbia Cascade Province. Also, in 1961, another 52 miles of habitat was blocked by the completion of the Chief Joseph Dam. In addition, there are six hydroelectric projects downstream of this Province: Wanapum Dam and Priest Rapids Dam, and four federally owned projects, McNary Dam, John Day Dam, The Dalles Dam and Bonneville Dam.

The loss of anadromous salmonid production by the federally built Projects was mitigated by the development and operation of the Leavenworth National Fish Hatchery in the Wenatchee subbasin (1940) and later in the Entiat and Winthrop National Fish Hatcheries in the Entiat and Methow subbasins, respectively. No federal mitigation facility was constructed in the Okanogan subbasin.

With the construction of each of the privately owned mid-Columbia hydroelectric projects, additional mitigation production/hatchery facilities were developed in the Columbia Cascade Province. The recent completion of the Habitat Conservation Plan (initiated by Chelan and Douglas Public Utility Districts (PUDs) for ESA Section 10 consultation) defined the mitigation obligation of the PUDs and provides the groundwork for future changes in facility production goals and operations. Details of these changes in hatchery production will be resolved over the next couple years.

In spite of past mitigation efforts, declining salmonid populations in the Columbia Cascade Province have resulted in listings of spring chinook (Endangered, March 1999) and summer steelhead (Endangered, August 1997) under the Endangered Species Act. Upper Columbia summer/fall chinook and Lake Wenatchee sockeye were also petitioned (March, 1998) but were determined not warranted for listing. Recent years have shown improved salmonid runs to the Province, consistent with findings throughout the Columbia Basin.

For the most part, the Columbia Cascade Province shares many of the same problems and opportunities for fish and wildlife habitat conditions as other Provinces within the interior Columbia Basin. The upper watersheds are primarily forested and have undergone substantial management activities. Lower reaches of the principal streams within each of the subbasin are almost completely privately owned and primarily managed through

agricultural practices. In all cases, habitat conditions range from pristine to severely degraded. Through the many past and on-going local resource-planning processes, various locations and activities have been identified as having high value in protecting and restoring fish and wildlife resources. Recently, NMFS identified the Methow subbasin as being high priority (within the interior Columbia Basin) for protection and restoration activities. CBFWA representatives for the Columbia Cascade have used the NPPC subbasin planning process as a means to bringing the many types of project proposals (many stemming from past recommendations, some proposals are new) together for a common evaluation. This report documents the result of these discussions.

Introduction

The Rolling Provincial Review process was developed by the Northwest Power Planning Council (NWPPC) in February 2000 in response to recommendations by the Independent Scientific Review Panel (ISRP) and the Columbia Basin Fish and Wildlife Authority (CBFWA). Under this new province based process each individual project proposal within a province will be reviewed for technical merit and management relevance every three years. Under the previous process all project proposals for Bonneville Power Administration (BPA) funding under the Fish and Wildlife Program were reviewed annually. The purpose of the NWPPC's new multi-year process is to reduce the burden of reviewing large numbers of proposals, most of which had been reviewed just one year before, and to provide for a more thorough review of the project proposals in the context of a subbasin summary. Additionally, the process is intended to provide the opportunity for site visits by reviewers, project presentations with a question and answer period, and provide reviewers with more detailed background and planning documents which will reduce the reviewer's reliance strictly on the proposal form.

The subbasin summaries developed under this process are intended to be interim and will be replaced by subbasin plans developed to meet requirements of the recently amended Fish and Wildlife Program. The Columbia Cascade Province was the sixth province to be reviewed under this new process. The results of this review are summarized here.

This document was developed collaboratively by the NWPPC staff, ISRP, fish and wildlife managers, other stakeholders, and CBFWA staff, culminating in project and budget recommendations for FY 2003-2005. The subbasin summaries are provided only as context for the project recommendations.

The CBFWA process for providing these recommendations utilized the ISRP preliminary findings and integrated manager evaluations of the technical and management merits of the project proposals relative to anadromous fish, resident fish and wildlife management needs, and the goals and objectives identified in the subbasin summaries. A total of 59 project proposals were submitted and reviewed with two proposals being withdrawn and one proposal receiving a "Do Not Fund" recommendation. The 56 recommended projects address needs identified in the subbasin summaries and include 50 new and 6 ongoing projects totaling \$17.3 million in Fiscal Year 2003.

This draft work plan includes the subbasin summaries, which describe the physical and biological characteristics of each subbasin within Columbia Cascade Province. The summaries also identify past accomplishments, limiting factors, management objectives and strategies, current needs and recommended budgets for project implementation.

Geographic Description

The Columbia Cascade Province (Figure 1) is located in north central Washington and southern British Columbia, Canada. This province extends from Wanapum Dam to Chief Joseph Dam on the Columbia River. There are four federally owned and operated hydroelectric dams and two privately owned and operated hydroelectric dams on the Columbia River downstream from the Province, and three privately owned and operated hydroelectric dams on the Columbia River within the Province.

Columbia Cascade Province

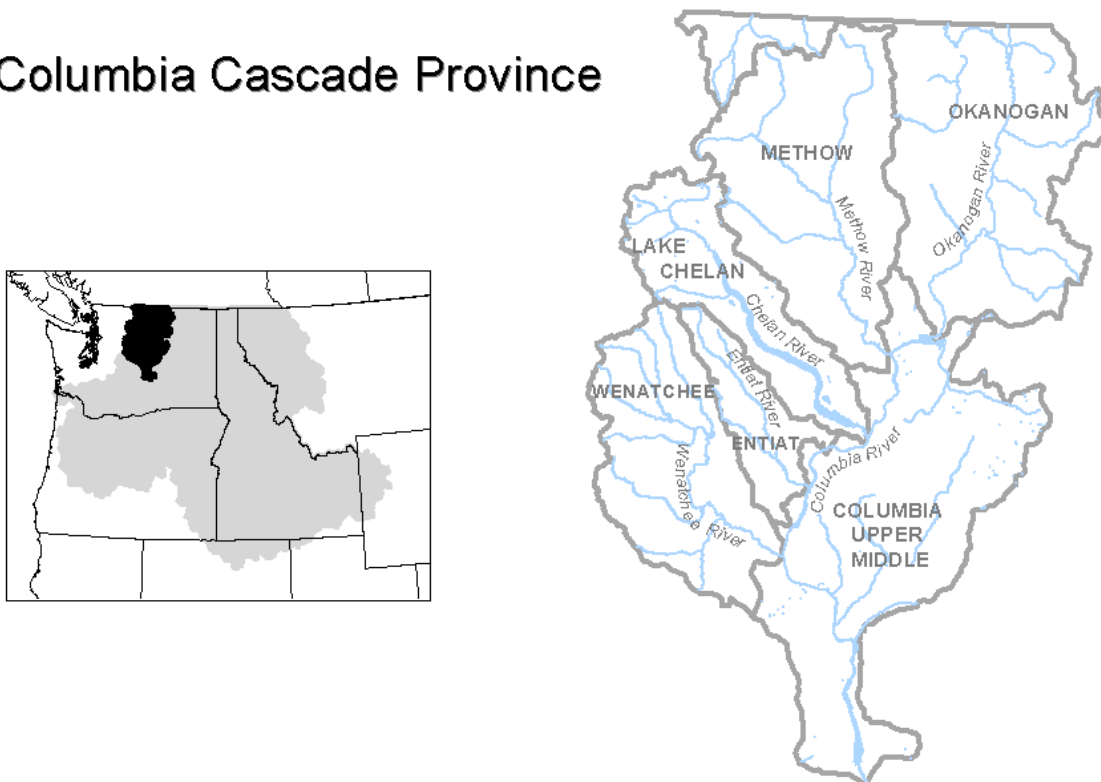


Figure 1. Columbia Cascade Province.

Project Review Process

Subbasin Summaries

The Columbia Cascade Province Review was initiated at a July 31, 2001 meeting in Wenatchee, Washington. An invitation was sent to an extensive distribution list to encourage all interested parties (i.e. land and water managers, representatives of watershed councils, etc.) to attend and provide input. The purpose of this first meeting was to provide all interested parties with the opportunity to identify sources of information necessary for the development of subbasin summaries for this province (i.e. monitoring data, habitat restoration results, existing assessments, etc.). The intent was to ensure BPA expenditures for fish and wildlife projects compliment and enhance existing efforts and ensure that priority needs are addressed. Subsequent meetings were held to review draft summaries and identify goals and objectives.

Previously, ecosystem summaries for each subbasin were developed as a means of providing context for project proposals. Under the new process, a more formal structure with subbasin teams was formed to develop the more comprehensive subbasin summaries of the newly identified provinces. Other local interested parties also provided input to and participated on the subbasin teams (i.e. other land and water managers, representatives from watershed councils, etc.).

Subbasin summaries for the Columbia Cascade Province were completed in October 2001. The BPA issued the solicitation for project proposals for Columbia Cascade Province on November 8, 2001, with project proposals due December 21, 2001. The project sponsors were asked to show a direct tie between their projects and the needs identified in the subbasin summaries.

Review by the ISRP

The ISRP reviewed 59 project proposals for the Columbia Cascade Province. To ensure a consistent and fair evaluation, standard formats and criteria were applied to all proposals to generate comments and scores prior to the proposal review workshop. These scores and comments were not made available to the project sponsors at the workshop, but were used by the ISRP to develop questions for the site visits and workshop presentations. The workshops consisted of site visits and project presentations.

Site Visits (October 24-25, 2001)

The ISRP, subbasin teams, fish and wildlife managers, the CBFWA province review team and other stakeholders toured the province to gain a better understanding of the existing ecological conditions and limiting factors as well as view some ongoing projects in each subbasin. During the tour, managers provided oral presentations for areas/projects within the province that the group was unable to visit.

Project Presentation (February 4-6, 2002)

Prior to the presentation of individual project proposals, subbasin team leaders provided a general overview for their respective summaries. Following each subbasin summary

presentation, project proposals relative to that subbasin were presented to the ISRP, CBFWA province review team, fish and wildlife managers, NWPPC staff, CBFWA staff and other stakeholders. All project sponsors were provided 15 minutes to present their proposal and answer questions. During this review, the CBFWA province review team applied Subbasin Project Review Criteria (Table 1) to each project. Every effort was made to be consistent among all project proposals reviewed.

Table 1. The CBFWA subbasin project review criteria.

Technical Criteria	
1. Does the proposal demonstrate that the project uses appropriate scientifically valid strategies or techniques and sound principles (best available science)?	Y or N
2. Are the objectives clearly defined with measurable outcomes and tasks that contribute toward accomplishment of the objectives?	Y or N
3. Are the resources proposed (staff, equipment, materials) appropriate to achieve the objectives and time frame milestones?	Y or N
4. Does the proposal include monitoring and evaluation to determine whether objectives are being achieved (including performance measures/methods) at the project level?	Y or N
5. Will the proposed project significantly benefit the target species/ indicator populations?	Y or N
6. Does the proposal demonstrate that project benefits are likely to persist over the long term and will not be compromised by other activities in the basin?	Y or N
7. Does the proposal demonstrate that all reasonable precautions have been taken, to not adversely affect habitat/populations of wildlife, native resident and anadromous fish?	Y or N
8. Are there explicit plans for how the information, technology etc. from this project will be disseminated or used?	Y or N
Management Criteria	
1. Does the proposed project address fish and wildlife related objectives, strategies, needs and actions as identified in the subbasin summaries?	Y or N
2. Does the project address an urgent requirement or threat to population maintenance and/or habitat protection (i.e., threatened, endangered or sensitive species)?	Y or N
3. Does the project promote/maintain sustainable and /or ecosystem processes or maintain desirable community diversity?	Y or N
4. Is there cost share for the construction/implementation and/or monitoring and evaluation of the project?	Y or N
5. Will the project complement management actions on private, public and tribal lands and does the project have demonstrable support from affected agencies, tribes and public?	Y or N
6. Will the project provide data critical for in season, annual and/or longer term management decisions?	Y or N
7. Will this project provide or protect riparian or other habitat that may benefit both fish and wildlife?	Y or N

Preliminary ISRP Report

On March 1, 2002, the ISRP released a *Preliminary Review of Fiscal Year 2003 Project Proposals for the Upper and Middle Snake, Columbia Cascade, and Lower Columbia and Estuary Provinces* (ISRP 2002-2 at NWPPC). This report summarized the ISRP's preliminary review of each project proposal and identified areas of concern where they had requested a written response to questions. The due date for written responses to this report was March 15, 2002.

CBFWA Province Review Group

During March 25-27, 2002, the CBFWA Province Review Group reviewed all project proposals within the province using criteria listed in Table 1 which resulted in a consensus Yes or No. Subbasin team members also participated in the review of the project proposals. The following elements were considered during the review:

- How well does the project relate to the criteria (Table 1)
- Validation of existing work- is the current funding level appropriate (Section 6 O&M and Section 7 M&E of existing projects)? Is it appropriate to continue implementation of existing work (Section 4 P&D and Section 5 C&I of existing projects)?
- Evaluation of proposed new work- does a new project proposal demonstrate a priority need over implementation strategies within existing projects (Sections 4 and 5 of existing projects)?

Project proposals were grouped by subbasin during their review. The preliminary ISRP technical review of all proposals was utilized while discussing the technical merits of each project. Following the technical and management review, the project proposals were prioritized within each subbasin according to the fish and wildlife needs within that subbasin. The following definitions were used for the subbasin prioritization:

- High Priority - These projects or tasks within a project are high priority within the subbasin. The project addresses a specific need within the subbasin summaries.
- Recommended Actions - These are good projects that cannot demonstrate a significant loss by not funding this year. These projects should be funded, but under a limited budget could be delayed temporarily without significant loss.
- Do not fund - These projects are either technically inadequate or do not address a need within the subbasin summaries. These projects may be inappropriate for BPA funding.

CBFWA Review and Approval of Project Recommendations and Subbasin Summaries

The final step in the project proposal review process was the consensus approval of the project recommendations by CBFWA Members. The CBFWA Members review and the recommendations in the subbasin summaries and province work plan demonstrate regional support by the fish and wildlife managers.

On April 22, 23, and 24, 2002, the province recommendations and subbasin summaries were discussed in the CBFWA Wildlife, Resident Fish, and Anadromous Fish committees, respectively. The committees made some modifications to the province recommendations based on technical or regional management concerns.

Proposal Review Results

A total of 59 project proposals were reviewed in the Columbia Cascade Province (6 ongoing projects and 53 new proposals, (Appendix A)). Two proposals were withdrawn from review (Project Numbers 29011 and 29056). One proposal was categorized as “Do Not Fund” (Project Number 29024).

Three-year Budget Recommendation

Appendix B provides a three-year funding recommendation for Columbia Cascade Province that strives to meet the goals, objectives and needs of the Province. A total of 56 projects that address needs identified in the subbasin summaries are recommended for funding and include new and ongoing projects totaling \$17.3 million for Fiscal Year 2003. All of the projects recommended here should be initiated within the next three years.

Columbia Upper Middle Subbasin

Seven new project proposals are recommended for funding in this subbasin (Table 2). Project Proposal 29009, *Acquire Dole-Beebe Property and Associated Water Rights*, will protect and enhance rare Columbia River frontage habitat through the purchase of an orchard property and the associated water right. Project Number 29025, *Columbia Cascade Province Pump Screening*, will provide a comprehensive re-assessment, re-inventory, and mitigation of previously inventoried pump screen sites in three subbasins (Wenatchee, Entiat and Methow) in the Province. Project Number 29037, *Ecosystem Diagnosis and Treatment in the Columbia Cascade Province*, will provide an analytic foundation, including refinement of the coarse screen EDT, needed for the aquatic assessment and management components of subbasin plans in this Province. Project Number 29041, *Evaluate Distribution, Abundance, Genetic Structure, and Habitat Use of Bull Trout Populations in the Columbia Cascade Province*, will identify habitat limiting factors for bull trout in the Wenatchee, Entiat and Methow rivers. Project Number 29043, *SSHIAP - Columbia Cascade Province*, will provide routed and segmented hydro-layer, and collate and synthesize data on 19 aquatic habitat variables over an estimated 22,500 miles of streams in the Province. Project Number 29052, *Spatial and Temporal Occurrence of Salmonid Pathogens in the Upper Middle Mainstem Subbasin of the Columbia Cascade Province*, will monitor the occurrence of salmonid pathogens and assess sources, fate and transport throughout the upper middle mainstem of the Columbia River. Project Number 29055, *Columbia Cascade Water Rights Acquisition*, will acquire senior water rights from instream flows in targeted small streams and tributaries to restore critically needed water for spawning, rearing and migration of listed and depressed species within the subbasins in this Province.

Table 2. Projects recommended for funding in the Columbia Upper Middle Subbasin.

ProjectID	Title	Sponsor
29009	Acquire Dole-Beebe Property and Associated Water Rights	Washington Department of Fish and Wildlife
29025	Columbia Cascade Province Pump Screening	Washington Department of Fish and Wildlife, Yakima Screen Shop
29037	Ecosystem Diagnosis and Treatment in the Columbia Cascade Province	Washington Department of Fish and Wildlife, Yakama Nation, Confederated Tribes of the Colville Reservation
29041	Evaluate Distribution, Abundance, Genetic Structure, and Habitat Use of Bull Trout Populations in the Columbia Cascade Province	U.S. Fish and Wildlife Service, Wenatchee Office
29043	SSHIAP - Columbia Cascade Province	Washington Department of Fish and Wildlife
29052	Spatial and Temporal Occurrence of Salmonid Pathogens in the Upper Middle Mainstem Subbasin of the Columbia Cascade Province	Washington State University
29055	Columbia Cascade Water Rights Acquisition	Washington Department of Ecology

Wenatchee Subbasin

Two existing projects are recommended for continued funding in this subbasin (Table 3). Project Number 199604000, *Evaluate The Feasibility And Risks Of Coho Reintroduction In Mid-Columbia*, will continue to determine the feasibility of re-establishing a naturally spawning coho population within the mid-Columbia tributaries, while keeping adverse ecological impacts on other salmonid species of concern within acceptable limits. Project Number 200000200, *Final Phase of the Chumstick Culvert Replacement and Habitat Restoration Enhancement*, will continue to restore salmon and steelhead passage in Chumstick Creek.

Four new project proposals are recommended for funding in this subbasin (Table 3). Project Number 29027, *Comprehensive Inventory and Prioritization of Fish Passage and Screening Problems in the Wenatchee and Entiat Subbasins*, will locate and evaluate all culverts, dams, fishways, water diversions, and other human-made features in the Wenatchee and Entiat subbasins, and conduct habitat assessments, and prioritize all barriers and unscreened or inadequately screened water diversions. Project Number 29028, *Fabricate and Install Three New Fish Screens on Wenatchee River Diversions*, will fabricate and install two new fish screening facilities, and rehabilitate one existing screening facility on three irrigation diversions in compliance with current screening criteria. Project Number 29039, *The effects of fine sediment on the hyporheic zone: monitoring and evaluating the influence of hyporheic exchange flows on stream temperature*, will implement sediment and water temperature monitoring, conduct research to evaluate the influence of hyporheic exchange flows on stream temperatures and thermal refugia and evaluate the influence of fine sediment on the hyperheic zone. Project Number 29053, *Icicle/Wenatchee Habitat Acquisition*, will acquire and protect a critical 50 acre area of salmonid spawning and rearing habitat at the confluence of the Icicle and Wenatchee rivers.

Table 3. Projects recommended for funding in the Wenatchee Subbasin.

ProjectID	Title	Sponsor
29027	Comprehensive Inventory and Prioritization of Fish Passage and Screening Problems in the Wenatchee and Entiat Subbasins	Washington Department of Fish and Wildlife, Yakima Screen Shop
29028	Fabricate and Install Three New Fish Screens on Wenatchee River Diversions	Washington Department of Fish and Wildlife, Yakima Screen Shop
29039	The effects of fine sediment on the hyporheic zone: monitoring and evaluating the influence of hyporheic exchange flows on stream temperature.	United States Forest Service - Pacific Northwest Research Station
29053	Icicle/Wenatchee Habitat Acquisition	Chelan-Douglas Land Trust
199604000	Evaluate The Feasibility And Risks Of Coho Reintroduction In Mid-Columbia	Yakama Nation
200000200	Final Phase of the Chumstick Culvert Replacement and Habitat Restoration Enhancement	Chelan County Conservation District

Entiat Subbasin

Two new project proposals are recommended for funding in this subbasin (Table 4). Project Number 29014, *The Effects of Impoundment on Fish and Amphibian Habitat Use in Eastern Washington*, will identify the hydrological effects of impoundments on fish and amphibian habitat and habitat use by comparing free-flowing and impounded systems. Project Number 29026, *Hanan-Detwiler Passage Improvements*, will complete passage improvements within a side channel of the Entiat River associated with the Hanan-Detwiler irrigation diversion.

Table 4. Projects recommended for funding in the Entiat Subbasin.

ProjectID	Title	Sponsor
29014	The Effects of Impoundment on Fish and Amphibian Habitat Use in Eastern Washington	Washington Department of Fish and Wildlife
29026	Hanan-Detwiler Passage Improvements	Washington Department of Fish and Wildlife, Yakima Screen Shop

Methow Subbasin

Thirteen new project proposals are recommended for funding in this subbasin (Table 5). Project Number 29002, *Conjunctive Use and River Enhancement (CURE) for Habitat Improvement in the Upper Methow River*, will enhance late summer streamflows in the Upper Methow River through direct streamflow augmentation using groundwater from the prolific Methow Aquifer. Project Number 29006, *Supplement Spring Chinook in Early Winters Creek*, will develop a “natural” acclimation/rearing site on Early Winters Creek to supplement native fish stocks. Project Number 29010, *Restore Passage on Private Lands in Beaver Creek Drainage to Benefit Spring Chinook, Steelhead and*

Bulltrout, will further long-term, ongoing efforts to fully restore anadromous fish passage on private lands within the Beaver Creek drainage. Project Number 29012, *Replace Rockview Diversion with Groundwater Withdrawal and Restore Instream Habitat*, will replace the Rockview diversion with groundwater withdrawal and restore instream habitat in the upper Methow subbasin. Project Number 29018, *Analyze ground-water and surface-water exchanges influencing anadromous salmonid habitat in the Methow River and its major tributaries*, will identify locations of ground water and surface water exchanges in the Methow, Twisp and Chewuch rivers; quantify the exchange rates and their seasonal patterns; and assess the influence of these exchanges on spring chinook habitat. Project Number 29020, *Beaver CR Campground Rehabilitation*, will restore the riparian area of Beaver Creek Campground by building 1300 feet of fencing to keep users away from the stream bank and planting, as needed, riparian species within the fenced area. Project Number 29030, *Early life history and survival of spring chinook salmon and steelhead in the Methow River Basin*, will investigate differential survival, behavior and habitat selection of juvenile spring chinook salmon and steelhead in relation to warm groundwater presence, river ice, and other habitat parameters. Project Number 29031, *Out Year Operations and Maintenance Costs Required to Implement/Carry out MVID Rehabilitation Project*, will provide operations and maintenance costs to support the Methow Valley Irrigation District Rehabilitation Project. Project Number 29034, *Life History Study of Salmonid Rearing In The Upper Methow River*, will address the need to understand salmonid temporal and spatial life history patterns and productivity in the intermittent portions of the upper Methow River. Project Number 29036, *Ali Long Rearing Channel Habitat Improvements- Upper Methow River*, will reconnect a historic side channel and add in-channel structure as needed in the upper Methow River. Project Number 29038, *Supplement Summer Steelhead Eightmile Creek/Chewuch River*, will develop a “natural” acclimation/rearing site on Eighmile Creek to supplement native fish stocks. Project Number 29044, *Protecting Habitat on Private Lands in the Methow Watershed*, will protect and provide long-term stewardship of habitat on private lands in the Methow Watershed through the use of perpetual conservation easements. Project Number 29046, *Develop a Coorindated Resource Management Plan for Beaver Creek and plan and implement habitat restoration activities*, will develop a Coordinated Resource Management Plan (CRMP) for the Beaver Creek drainage, restore habitat complexity, protect and restore riparian habitat, and research alternatives for ensuring perennial flow in lower Beaver Creek.

Table 5. Projects recommended for funding in the Methow Subbasin.

ProjectID	Title	Sponsor
29002	Conjunctive Use and River Enhancement (CURE) for Habitat Improvement in the Upper Methow River	Chewuch Basin Council, Methow Salmon Recovery Foundation (co-sponsor), Confederated Colville Tribes (co-sponsor)
29006	Supplement Spring Chinook in Early Winters Creek	Methow Salmon Recovery Foundation, Chewuch Basin Council (co-sponsor), Colville Confederated Tribes (co-sponsor), Yakima Indian Nation (co-sponsor), Washington Department of Fish and Wildlife (co-sponsor)

ProjectID	Title	Sponsor
29010	Restore Passage on Private Lands in Beaver Creek Drainage to Benefit Spring Chinook, Steelhead and Bulltrout	Washington Department of Fish and Wildlife
29012	Replace Rockview Diversion with Groundwater Withdrawal and Restore Instream Habitat	Washington Department of Fish and Wildlife
29018	Analyze ground-water and surface-water exchanges influencing anadromous salmonid habitat in the Methow River and its major tributaries	U.S. Geological Survey, Water Resources Discipline, Washington District
29020	Beaver CR Campground Rehabilitation	Okanogan Conservation District
29030	Early life history and survival of spring chinook salmon and steelhead in the Methow River Basin	Pacific Northwest National Laboratory
29031	Out Year Operations and Maintenance Costs Required to Implement/Carry out MVID Rehabilitation Project	Yakama Nation
29034	Life History Study of Salmonid Rearing In The Upper Methow River	Yakama Nation
29036	Ali Long Rearing Channel Habitat Improvements- Upper Methow River	Yakama Nation
29038	Supplement Summer Steelhead Eightmile Creek/Chewuch River	Methow Salmon Recovery Foundation, Chewuch Basin Council (co-sponsor), Colville Confederated Tribes (co-sponsor), Yakama Nation (co-sponsor), Washington Department of Fish and Wildlife (co-sponsor)
29044	Protecting Habitat on Private Lands in the Methow Watershed	Methow Conservancy
29046	Develop a Coordinated Resource Management Plan for Beaver Creek and plan and implement habitat restoration activities.	Okanogan Conservation District, Colville Confederated Tribes (co-sponsor)

Okanogan Subbasin

Four existing project is recommended for continued funding in the Columbia River Estuary (Table 6). Project Number 199604200, *Restore and Enhance Anadromous Fish Populations and Habitat in Salmon Creek*, will restore and enhance anadromous fish populations and habitat in Salmon Creek, a tributary that has been identified as having the best potential for restoration of anadromous fish populations in the entire Okanogan Basin. Project Number 199609400, *Increase sharp-tailed grouse and mule deer populations and enhance shrubsteppe/riparian habitats on the Scotch Creek Wildlife Area*, will protect, increase and maintain a viable sharp-tailed grouse population, increase mule deer use of the project site, and enhance shrub-steppe habitat for shrub-steppe obligate species. Project Number 200000100, *Improvement of Anadromous Fish Habitat and Passage in Omak Creek*, will implement a plan to restore 40 miles of historical anadromous fish habitat (summer steelhead) by improving land management practices and conducting restoration activities that accelerate recovery of the Omak Creek watershed. Project Number 200001300, *Evaluate An Experimental Re-introduction of Sockeye Salmon into Skaha Lake*, will complete an evaluation of experimental re-introduction of sockeye salmon into Skaha Lake in the Okanogan River Basin by performing a disease risk assessment.

Twenty-four new project proposals are recommended for funding in this subbasin (Table 6). Ten projects address baseline assessment and monitoring and evaluation objectives.

Project Number 29001, *Evaluation of 1872 Water Rights to Supplement Flows Between Basins*, will develop a known data base to prioritize available CCT 1872 water rights which may be transferred, (if abandoned or purchased if available), and placed into trust to supplement instream flows, both within or transferred between subbasins. Project Number 29005, *Validate Occurrence and Assess Abundance of Wildlife Species*, will verify, monitor, and inventory wildlife species presence and abundance in this project area as indicated by the species list cited in “Wildlife-Habitat Relationships in WA/OR”. Project Number 29008, *Adult Passage Counting and Trapping at Zosel Dam*, will conduct a feasibility assessment of adult fish counting at Zosel Dam on the Okanogan River and evaluate a preferred option through desing, installation and evaluation. Project Number 29015, *Thermal Imaging and Total Maximum Daily Load (TMDL) Development on the Okanogan Subbasin*, will expedite the development of a water cleanup plan (TMDL) for the Okanogan to identify sources of pollution related to temperature, DO and pH; allocate maximum allowable pollution from various sources; and develop strategies to improve salmonid habitat. Project Number 29019, *Characterize and Assess Wildlife-Habitat Types and Structural Conditions for Okanogan sub-basin*, will develop a fine-scale habitat assessment for the Okanogan subbasin which will produce critical baseline data for planning and monitoring efforts that is consistent within the NWPPC Framework wildlife-habitat relationships process. Project Number 29021, *Develop a Physical Processes Method (PPM) to Supplement Habitat Conditions Analysis and Subbasin Planning*, will develop a physical process method to augment ecosystem assessments and aid subbasin planning. Project Number 29022, *Omak Creek Water Temperature Model*, will characterize the water temperature regime in Omak Creek, quantify range of variability, and develop a numerical model to assess the effect of water and land use in the watershed on water temperature and to predict effectiveness of salmon recovery actions. Project Number 29029, *Perform Range Forage Inventory for Large Ungulates*, will perform a grazing resource inventory to enable identification and location of grazing lands, forage availability and quality, for the management of large ungulates including elk, mule and white tail deer, moose and big horn sheep. Project Number 29033, *Design and Conduct Monitoring and Evaluation Associated With Reestablishment of Okanogan Basin Natural Production*, will establish a monitoring and evaluation program to evaluate the focused array of salmon and steelhead propagation initiatives the CCT are implementing in an effort to rebuild anadromous, naturally-produced salmon runs and increase harvest opportunities. Project Number 29054, *Stream Gaging Installation and Operations*, will purchase and install eight continuous, real-time, telemetered stream flow gages, and six staff gages, at critical reaches and tributaries in each of three subbasins.

Three projects are proposing land acquisition in the Okanogan Subbasin. Project Number 29003, *Acquire Property for Partial Wildlife mitigation*, will acquire, protect, enhance and evaluate wildlife habitat and species for partial mitigation for losses to wildlife resulting from Grand Coulee and Chief Joseph Dams. Project Number 29013, *Acquire Land Adjacent to Chiliwist Creek and Develop Summer Chinook and Summer Steelhead Acclimation Pond*, will acquire 89 acres of apple orchard adjacent to Chiliwist Creek and develop an acclimation pond to imprint summer chinook and summer steelhead in order to improve returning spawning distribution in the Okanogan Subbasin. Project Number

29035, *Okanogan River Riparian and Upland Fish and Wildlife Habitat Acquisition*, will protect and restore existing high quality riparian, floodplain, and adjacent upland from development, and preserve important spawning, rearing and holding habitat in the Okanogan River through property acquisition and development of long-term research.

Five projects are focused on restoration activities in the Okanogan Subbasin. Project Number 29004, *Control Okanogan Weeds -Invasive Species Project*, will develop an integrated program to control invasive noxious weeds for the benefit of wildlife and their associated ecosystems through the use of biologic insect agents, education, outreach, and habitat management. Project Number 29016, *Return of Okanogan Sockeye Salmon to their historic range*, will design and construct fish passage at McIntyre Dam and screening at South Okanogan Land Irrigation District irrigation intake. Project Number 29023, *Restoration/Protection of Kartar Creek In-stream, riparian, and Wetland Habitats*, will enhance natural reproduction, establish sustainable fisheries, and provide a riparian corridor for seasonal wildlife as partial mitigation for losses of anadromous fish and wildlife created by the construction of Grand Coulee and Chief Joseph Dams. Project Number 29032, *Okanogan Basin Water Strategy Development and Pilot Projects*, will identify, formulate, and implement reasonable and feasible water strategies at the local level to increase instream flow within three selected pilot project tributaries of the Okanogan Basin. Project Number 29045, *Protect and Restore Salmon and Steelhead Habitat at the Similkameen/Okanogan River Confluence*, will design and implement measures to protect and restore flood plain processes for 12 miles of spawning, rearing, and migratory habitat of the Okanogan/Similkameen rivers through an adaptive management process.

Six projects are recommended for funding in the Okanogan Subbasin that address production based recovery programs. Project Number 29007, *Okanogan Kelt Reconditioning*, will recondition steelhead kelts in the Okanogan River system to allow repeat spawning in the wild and promote rebuilding of this Endangered ESU. Project Number 29017, *Prepare a Master Plan for Protecting and Restoring Salmon Habitat in Okanogan River*, will prepare a master plan to guide protection and restoration of sockeye salmon habitat in the Canadian portion of the Okanogan River. Project Number 29040, *OK-11 Develop and Propagate Local Okanogan River Summer/Fall Chinook*, will acclimate existing summer chinook production near historic habitat, increase production for the Okanogan and upper middle Columbia rivers, initiate production of late-arriving fall chinook, and initiate a local chinook brood stock. Project Number 29042, *Selective Fish Collection and Harvesting*, will develop, test and deploy several types of selective fishing gear to capture chinook, steelhead, and sockeye for the purposes of tribal harvest, brood stock collection, and research, monitoring and evaluation. Project Number 29050, *Phase I Okanogan River Spring Chinook Production*, will reintroduce spring chinook in to the Okanogan subbasin to provide for tribal cultural, subsistence, and recreational fisheries. Project Number 29051, *Develop Local Okanogan River Steelhead Brood Stock*, will collect steelhead brood stock from local sources and transfer propagation actives from Wells Hatchery to Cassimer Bar Hatchery.

Table 6. Projects recommended for funding in the Okanogan Subbasin.

ProjectID	Title	Sponsor
29001	Evaluation of 1872 Water Rights to Supplement Flows Between Basins	Confederated Tribes of the Colville Reservation
29003	Acquire Property for Partial Wildlife mitigation	Confederated Tribes of the Colville Reservation
29004	Control Okanogan Weeds -Invasive Species Project	Confederated Tribes of the Colville Reservation
29005	Validate Occurrence and Assess Abundance of Wildlife Species	Confederated Tribes of the Colville Reservation
29007	Okanogan Kelt Reconditioning	Confederated Confederated Tribes
29008	Adult Passage Counting and Trapping at Zosel Dam	Colville Confederated Tribes
29013	Acquire Land Adjacent to Chiliwist Creek and Develop Summer Chinook and Summer Steelhead Acclimation Pond	Washington Department of Fish and Wildlife
29015	Thermal Imaging and Total Maximum Daily Load (TMDL) Development on the Okanogan Subbasin.	Colville Confederated Tribes
29016	Return of Okanogan Sockeye Salmon to their historic range.	Colville Confederated Tribes/Okanogan Nation Fisheries Commission
29017	Prepare a Master Plan for Protecting and Restoring Salmon Habitat in Okanogan River	Colville Confederated Tribes/Okanogan Nation Fisheries Commission
29019	Characterize and Assess Wildlife-Habitat Types and Structural Conditions for Okanogan sub-basin	Northwest Habitat Institute and the Colville Confederated Tribes
29021	Develop a Physical Processes Method (PPM) to Supplement Habitat Conditions Analysis and Subbasin Planning	Golder Associates Inc.
29022	Omak Creek Water Temperature Model	Confederated Tribes of the Colville Reservation
29023	Restoration/Protection of Kartar Creek In-stream, riparian, and Wetland Habitats	Colville Confederated Tribes, Fish and Wildlife Department
29029	Perform Range Forage Inventory for Large Ungulates	Confederated Tribes of the Colville Reservation
29032	Okanogan Basin Water Strategy Development and Pilot Projects	Confederated Tribes of the Colville Reservation/Okanogan County
29033	Design and Conduct Monitoring and Evaluation Associated With Reestablishment of Okanogan Basin Natural Production	Confederated Tribes of the Colville Reservation
29035	Okanogan River Riparian and Upland Fish and Wildlife Habitat Acquisition	Stewardship Partners, formerly Resource Action Council
29040	OK-11 Develop and Propagate Local Okanogan River Summer/Fall Chinook	Confederated Tribes of the Colville Reservation
29042	Selective Fish Collection and Harvesting	Confederated Tribes of the Colville Reservation
29045	Protect and Restore Salmon and Steelhead Habitat at the Similkameen/Okanogan River Confluence	Upper Columbia Regional Fisheries Enhancement Group, co-sponsors: U.S. Fish and Wildlife Service
29050	Phase I Okanogan River Spring Chinook Production	Confederated Tribes of the Colville Reservation
29051	Develop Local Okanogan River Steelhead Brood Stock	Confederated Tribes of the Colville Reservation
29054	Stream Gaging Installation and Operations	Department of Ecology
199604200	Restore and Enhance Anadromous Fish Populations and Habitat in Salmon Creek	Colville Confederated Tribes
199609400	Increase sharp-tailed grouse and mule deer populations and enhance shrubsteppe/riparian habitats on the Scotch Creek Wildlife Area.	Washington Department of Fish and Wildlife
200000100	Improvement of Anadromous Fish Habitat and Passage in Omak Creek	Colville Confederate Tribes
200001300	Evaluate An Experimental Re-introduction of Sockeye Salmon into Skaha Lake	Colville Confederate Tribes

Appendix A. Results from the CFWA Project Proposal Review for Columbia Cascade Province*

*Due to space constraints, text in the criteria fields shown as “n” over “a” should be interpreted as “n/a”.

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T	T	T	T	T	T	T	T	M	M	M	M	M	M	M		
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7		
Columbia Upper Middle																				
29009	Acquire Dole-Beebe Property and Associated Water Rights	Washington Department of Fish and Wildlife	Columbia Upper Middle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	WDFW is going to contribute \$500,000 towards the purchase of this property in FY03, the budget has been modified to reflect this action. Question cost of the property because appraisal is not completed Fair Market Value. NMFS has identified this project as a BiOp project.	High Priority	
29024	Analysis of multiple land uses and their effects to shrub-steppe habitat and wildlife species, such as roads, patterns of development and agriculture.	Douglas County	Columbia Upper Middle	N	Y	N	N	N	N	N	Y	Y	N	N	N	Y	Y	Should be funded by using other funds. Methodology unclear. No protocol for ground-truthing	Do Not Fund	
29025	Columbia Cascade Province Pump Screening	Washington Department of Fish and Wildlife, Yakima Screen Shop	Columbia Upper Middle	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	How many screens will be addressed during the assessment portion of this project? Is this project addressing a compliance and enforcement issue? If so, is this the responsibility of BPA (RPA language?). NMFS has identified this project as a BiOp project.	High Priority	
29037	Ecosystem Diagnosis and Treatment in the Columbia Cascade Province	Washington Department of Fish and Wildlife, Yakama Nation, Confederated Tribes of the Colville Reservation	Columbia Upper Middle	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	N	The budget for this project has been reduced to reflect ecosystem diagnosis but not treatment and salmon recovery funding is being pursued. Funding was not provided through the WA SRFB process. NMFS has identified this project as a BiOp project.	High Priority	

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T	T	T	T	T	T	T	T	M	M	M	M	M	M	M		
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7		
29041	Evaluate Distribution, Abundance, Genetic Structure, and Habitat Use of Bull Trout Populations in the Columbia Cascade Province	U.S. Fish and Wildlife Service, Wenatchee Office	Columbia Upper Middle	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Supplies and equipment could be available at the research station and genetics cost seem high. Could other cost reductions can be achieved? USFWS has identified this project as a BiOp project.	High Priority	
29043	SSHAP - Columbia Cascade Province	Washington Department of Fish and Wildlife	Columbia Upper Middle	Y	Y	Y	N	Y	N	N	Y	Y	N	Y	Y	Y	Y	NMFS has identified this project as a BiOp project.	Recommended Action	
29052	Spatial and Temporal Occurrence of Salmonid Pathogens in the Upper Middle Mainstem Subbasin of the Columbia Cascade Province	Washington State University	Columbia Upper Middle	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	NMFS has identified this project as a BiOp project.	Recommended Action	
29055	Columbia Cascade Water Rights Acquisition	Washington Department of Ecology	Columbia Upper Middle	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	M&E not adequately described. Is the water guaranteed to remain in streams? What is the criteria for purchasing rights? The priority of this project depends on the status of the development of the BPA water banking strategy. Subbasin planning will also help guide the implementation of this effort. Capital funds should be removed from the first year and focus should be applied to reviewing the database and prioritizing purchases for the out years. The budget has been reduced to reflect this. NMFS has identified this project as a BiOp project.	High Priority	

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T	T	T	T	T	T	T	T	M	M	M	M	M	M	M		
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7		
Entiat																				
29014	The Effects of Impoundment on Fish and Amphibian Habitat Use in Eastern Washington	Washington Department of Fish and Wildlife	Entiat	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	N	Not needed for fish but is needed for amphibians. Question urgency. Check coordination. NMFS has identified this as a BiOp project.	Recommended Action	
29026	Hanan-Detwiler Passage Improvements	Washington Department of Fish and Wildlife, Yakima Screen Shop	Entiat	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Needs better development of M&E. USFWS are currently performing spawning surveys in the Entiat subbasin. The reviewers do not believe that the contingency funds proposed are BPA fundable. NMFS has identified this project as a BiOp project.	High Priority
Methow																				
29002	Conjunctive Use and River Enhancement (CURE) for Habitat Improvement in the Upper Methow River	Chewuch Basin Council, Methow Salmon Recovery Foundation (co-sponsor), Confederated Colville Tribes (co-sponsor)	Methow	Y	Y	Y	Y	Y	N	Y	N	Y	Y	N	Y	N	Y	Y	Lacks universal public acceptance. May be foregoing less expensive alternatives. NMFS has identified this project as a BiOp project.	Recommended Action

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category	
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7			
29006	Supplement Spring Chinook in Early Winters Creek	Methow Salmon Recovery Foundation, Chewuch Basin Council (co-sponsor), Colville Confederated Tribes (co-sponsor), Yakima Indian Nation (co-sponsor), Washington Department of Fish and Wildlife (co-sponsor)	Methow	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	N	The hatchery programs in the Methow are currently undergoing evaluation and potentially restructuring. The PUD hatchery committee will be organizing and planning in the near future. The BOR hatchery program is considering moving towards supplementation, but decisions have not been made. This project may be ahead of those efforts and cannot be tied to specific planning documents at this time. This project may be a key element in the future, but at this time that cannot be determined. NMFS has identified this as a BiOp project.	Recommended Action
29010	Restore Passage on Private Lands in Beaver Creek Drainage to Benefit Spring Chinook, Steelhead and Bulltrout	Washington Department of Fish and Wildlife	Methow	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Due to funding for a Coordinated Resource Management Plan from the WA SRFB, the costs for this project can be reduced by 20% across the board and implementation of this project can be deferred for one year. NMFS has identified this project as a BiOp project.	High Priority
29012	Replace Rockview Diversion with Groundwater Withdrawal and Restore Instream Habitat	Washington Department of Fish and Wildlife	Methow	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Concept seems highly likely to succeed. The budget has been reduced by \$40,000 to reflect eliminating the feasibility study portion of the proposal. Mark recapture techniques are likely to result in permitting difficulties and using snorkel surveys would be more appropriate and reduce costs. An additional \$10,000 has been removed from the budget to reflect a modified sampling procedure. NMFS has identified this as a BiOp project.	High Priority

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7		
29018	Analyze ground-water and surface-water exchanges influencing anadromous salmonid habitat in the Methow River and its major tributaries	U.S. Geological Survey, Water Resources Discipline, Washington District	Methow	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	Y	N	80% indirect rate on the whole contract is excessive based on rates charged by other projects. NMFS has identified this project as a BiOp project.	High Priority
29020	Beaver CR Campground Rehabilitation	Okanogan Conservation District	Methow	N	N	Y	N	N	N	Y	N	Y	N	N	Y	Y	N	Y	NMFS has identified this project as a BiOp project.	Recommended Action
29030	Early life history and survival of spring chinook salmon and steelhead in the Methow River Basin	Pacific Northwest National Laboratory	Methow	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y	N	N	N	NMFS has identified this project as a BiOp project.	Recommended Action
29031	Out Year Operations and Maintenance Costs Required to Implement/Carry out MVID Rehabilitation Project	Yakama Nation	Methow	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	M&E not adequately described and may be funded from other sources if project goes forward. Funding may not be needed. NMFS has identified this project as a BiOp project.	Recommended Action
29034	Life History Study of Salmonid Rearing In The Upper Methow River	Yakama Nation	Methow	Y	Y	Y	N	N	N	Y	Y	Y	Y	N	N	Y	Y	N	NMFS has identified this project as a BiOp project.	Recommended Action
29036	Ali Long Rearing Channel Habitat Improvements-Upper Methow River	Yakama Nation	Methow	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	N	Y	N	Y	Concern about dewatering in some years. NMFS has identified this project as a BiOp project.	Recommended Action

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category	
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7			
29038	Supplement Summer Steelhead Eightmile Creek/Chewuch River	Methow Salmon Recovery Foundation, Chewuch Basin Council (co-sponsor), Colville Confederated Tribes (co-sponsor), Yakama Nation (co-sponsor), Washington Department of Fish and Wildlife (co-sponsor)	Methow	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Need more definitive data to be sure project will succeed. The hatchery programs in the Methow are currently undergoing evaluation and potentially restructuring. The PUD hatchery committee will be organizing and planning in the near future. The BOR hatchery program is considering moving towards supplementation, but decisions have not been made. This project may be ahead of those efforts and cannot be tied to specific planning documents at this time. This project may be a key element in the future, but at this time that cannot be determined.	Recommended Action
29044	Protecting Habitat on Private Lands in the Methow Watershed	Methow Conservancy	Methow	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Proposal lacks detail necessary for through technical review (How will properties be selected?) M&E is inadequate and need is questionable. Riparian and salmon habitats are the same thing and would not need separate easements. This project received \$424,800 from the WA SRFB funding for 2002. CBFWA supports this project at a reduced rate. The budget has been modified to reflect a reduced rate of implementation of \$75,000 per year. NMFS has identified this project as a BiOp project.	High Priority
29046	Develop a Coorindated Resource Management Plan for Beaver Creek and plan and implement habitat restoration activities.	Okanogan Conservation District, Colville Confederated Tribes (co-sponsor)	Methow	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	NMFS has identified this project as a BiOp project. Due to WA SRFB funding, the project sponsor has requested that the budget for 2003 be reduced by \$27,325 (1/3 FTE = \$20,000, 3 pressure transducers = \$6,500, and office space rental = \$825). The total FY 2003 project cost of \$51,783 has been reduced to \$24,458 accordingly.	Recommended Action

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category	
				T	T	T	T	T	T	T	T	M	M	M	M	M	M	M			
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7			
Okanogan																					
199604200	Restore and Enhance Anadromous Fish Populations and Habitat in Salmon Creek	Colville Confederated Tribes	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	An EIS is currently being developed that will guide the eventual design of this project. The current proposal addresses all possible alternatives. It is anticipated that through the 3-step process, the focus and scope of the project will be defined. Funding should be provided for ongoing activities until the EIS is completed. NMFS has identified this project as a BiOp project.	High Priority
199609400	Increase sharp-tailed grouse and mule deer populations and enhance shrubsteppe/riparian habitats on the Scotch Creek Wildlife Area.	Washington Department of Fish and Wildlife	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	This project protects and enhances critical sharp-tailed grouse/shrub steppe habitat and is a significant component of WDFW's statewide sharp-tailed grouse recovery strategy. The project sponsor has removed \$53,000 from the Construction and Implementation phase of the project for 2003 and 2004 by delaying equipment purchases until 2005. The budget has been modified to reflect those changes.	High Priority
200000100	Improvement of Anadromous Fish Habitat and Passage in Omak Creek	Colville Confederate Tribes	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NMFS has identified this project as a BiOp project.	High Priority
200001300	Evaluate An Experimental Re-introduction of Sockeye Salmon into Skaha Lake	Colville Confederate Tribes	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Important on-going project, funding for only one year and small amount should make this a top priority.	High Priority

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7		
29001	Evaluation of 1872 Water Rights to Supplement Flows Between Basins	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	N	Y	Y	N	This is an assessment project to determine possible water reallocation to instream flows. Would reduce illegal taking of water rights. Stream flow data is being collected at several sites within the basin already question the need for additional data? The project sponsor reduced the budget by \$38,000 by transferring the water rights without using a subcontractor. The budget has been reduced to reflect this. This project has been identified as a potential BiOp project by NMFS.	High Priority
29003	Acquire Property for Partial Wildlife mitigation	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	CBFWAs ranking of this project focuses on the Tumwater Basin parcels that the CCT is currently pursuing. The project sponsor has reduced the budget by \$500,000 in 2003.	High Priority
29004	Control Okanogan Weeds -Invasive Species Project	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y		Recommended Action
29005	Validate Occurrence and Assess Abundance of Wildlife Species	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	N		Recommended Action
29007	Okanogan Kelt Reconditioning	Confederated Confederated Tribes	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	This project should be well coordinated with the kelt reconditioning projects currently ongoing by CRITFC. NMFS has identified this as a BiOp project.	High Priority
29008	Adult Passage Counting and Trapping at Zosel Dam	Colville Confederated Tribes	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	This project would address a major data gap in adult counting. The ladder counts at Wells Dam as compared with the spawning survey counts vary by 100%. This project would fill a gap between those two locations. The first year of the study is a feasibility study to determine all possible options.	High Priority

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category	
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7			
29011	Sharp-tailed Grouse and Mule Deer Habitat Restoration and Enhancement on Sinlahekin Wildlife Area	Washington Department of Fish and Wildlife	Okanogan																	proposal withdrawn	withdrawn
29013	Acquire Land Adjacent to Chiliwist Creek and Develop Summer Chinook and Summer Steelhead Acclimation Pond	Washington Department of Fish and Wildlife	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	This project should be phased to purchase land in FY 03, perform planning, design and permitting in FY 04 and in FY 05 begin construction of the ponds and funding operation. The budget has been adjusted to represent this recommendation. Confirmation of the budget is needed from the project sponsor. Land has not been appraised so land costs are likely higher than fair market value.	High Priority	
29015	Thermal Imaging and Total Maximum Daily Load (TMDL) Development on the Okanogan Subbasin.	Colville Confederated Tribes	Okanogan	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	N	The WA SRFB funded \$84,750 for 2003 for this project. The budget has been adjusted to reflect this. Should be EPA funded or at least cost shared, the project could utilize temperature data collected by OCD and CCT. Cold water inputs will be more difficult to detect in the summer than warm water inputs in the winter. Experimental design is questionable for providing usable information. Flight time cost could be reduced with better design. NMFS has identified this project as a BiOp project.	High Priority	
29016	Return of Okanogan Sockeye Salmon to their historic range.	Colville Confederated Tribes/Okanagan Nation Fisheries Commission	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	The proposed budget for this project covers several alternatives. A less expensive alternative may be chosen through a public process. The project sponsor has indicated that 2004 budget could range from \$400,000 to \$1,274,000 depending on results from 2003. The project sponsor has reduced the request for 2004 by 75%.	High Priority	
29017	Prepare a Master Plan for Protecting and Restoring Salmon Habitat in Okanogan River	Colville Confederated Tribes/Okanagan Nation Fisheries Commission	Okanogan	Y	Y	Y	N	N	N	Y	Y	Y	Y	N	Y	Y	N		Recommended Action		

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T	T	T	T	T	T	T	T	M	M	M	M	M	M	M		
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7		
29019	Characterize and Assess Wildlife-Habitat Types and Structural Conditions for Okanogan sub-basin	Northwest Habitat Institute and the Colville Confederated Tribes	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In-house data base refinement at very reasonable costs.	High Priority
29021	Develop a Physical Processes Method (PPM) to Supplement Habitat Conditions Analysis and Subbasin Planning	Golder Associates Inc.	Okanogan	Y	Y	Y	N	N	N	N	Y	Y	N	N	Y	Y	Y	N	Although some development of the methodology is necessary, this project should not be funded until EDT activities are underway.	Recommended Action
29022	Omak Creek Water Temperature Model	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	NMFS has identified this project as a BiOp project.	Recommended Action
29023	Restoration/Protection of Kartar Creek In-stream, riparian, and Wetland Habitats	Colville Confederated Tribes, Fish and Wildlife Department	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Columbia Cascade Province Budget Work Group supports funding Objective 1 with a phased approach and reduced costs. There are only two resident fish proposals in this province. This would convert a supplementation project funded by BPA into a natural production program. The budget has been adjusted to reflect the recommendation for High Priority.	High Priority (Objective 1)
29029	Perform Range Forage Inventory for Large Ungulates	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	N	Y	Y	Y	Historic data is 60 years old and a new inventory is badly needed.	High Priority
29032	Okanogan Basin Water Strategy Development and Pilot Projects	Confederated Tribes of the Colville Reservation/ Okanogan County	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Project sponsor has indicated that Objective 3c can be reduced by \$25,000 for 2003. NMFS has identified this project as a BiOp project.	High Priority

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7		
29033	Design and Conduct Monitoring and Evaluation Associated With Reestablishment of Okanogan Basin Natural Production	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	Possible cost share for spring chinook through pacific salmon recovery funds. Objective 2-7, spring chinook monitoring, is unnecessary and Objective 7 monitoring is already covered by project# 29042. The budget has been reduced for 2003 by \$290,000. Provides personnel funding for projects 29042, and 29050. NMFS has identified this project as a BiOp project.	High Priority	
29035	Okanogan River Riparian and Upland Fish and Wildlife Habitat Acquisition	Stewardship Partners, formerly Resource Action Council	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Portions of this proposal have been submitted through the Washington SRFB process. NMFS has identified this project as a BiOp project.	Recommended Action	
29040	OK-11 Develop and Propagate Local Okanogan River Summer/Fall Chinook	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	The project sponsor has reduced Task 2.2 by \$200,000 in 2003. Objective 3.3 or 4.3 can be delayed until 2004 transferring \$8,500 from 2003 to 2004.	High Priority	
29042	Selective Fish Collection and Harvesting	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	N	The project sponsor has reduced Objective 1c by \$35,000. Also, \$30,000 could be eliminated from equipment costs by sharing equipment with other projects. This would make 2003 budget \$166,000. The budget has been adjusted to reflect these changes. Potential exists for deferring other costs to 2004 or 2005. NMFS has identified this project as a BiOp project.	High Priority	
29045	Protect and Restore Salmon and Steelhead Habitat at the Similkameen/Okanogan River Confluence	Upper Columbia Regional Fisheries Enhancement Group, co-sponsors: U.S. Fish and Wildlife Service	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	This project received \$239,700 for 2003 from the WA SRFB. Funding should be continued through BPA in 2004 and 2005. NMFS has identified this project as a BiOp project.	High Priority	
29050	Phase I Okanogan River Spring Chinook Production	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Out year costs for objective 5 could be reduced in 2004-2007.	High Priority	

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category	
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7			
29051	Develop Local Okanogan River Steelhead Brood Stock	Confederated Tribes of the Colville Reservation	Okanogan	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	The master plan and hatchery design can be reduced by \$70,000 in 2003. Out-year reduction may be possible. The final capital needs will be determined through the master planning process.	High Priority
29054	Stream Gaging Installation and Operations	Department of Ecology	Okanogan	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y	N	Y	Y	N	This project was funded under the 2001 Action Plan category. The budget has been modified to represent the expected O&M for FY03 and FY04 (3 0.5 FTEs). NMFS has identified this project as a BiOp project.	High Priority	
Wenatchee																					
199604000	Evaluate The Feasibility And Risks Of Coho Reintroduction In Mid-Columbia	Yakama Nation	Wenatchee	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	The project sponsor (YIN) has reduced their budget to FY 2002 funding level plus 3.4% for FY 2003. The budget will increase by 3.4% each year. Specific reductions will be identified during contracting with BPA.	High Priority	
200000200	Final Phase of the Chumstick Culvert Replacement and Habitat Restoration Enhancement	Chelan County Conservation District	Wenatchee	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Critical to realize upstream benefits. Should not be further delayed. The Chumstick Creek will potentially become a valuable coho stream. WA SRFB has approved funding of \$273,100 for 2002 contingent on the completion of the North Road culvert project. Designs are currently being finalized for that project. The budget has been modified to reflect the project sponsors additional needs from BPA to complete two additional culvert replacements. NMFS has identified this project as a BiOp project.	High Priority	
29027	Comprehensive Inventory and Prioritization of Fish Passage and Screening Problems in the Wenatchee and Entiat Subbasins	Washington Department of Fish and Wildlife, Yakima Screen Shop	Wenatchee	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Assure work is coordinated with Chelan County. The reviewers recommend reducing the staff proposed by 1 FTE and find other sources for the 2 4x4 pickup trucks in 2003. The budget has been reduced to reflect these changes. NMFS has identified this project as a BiOp project.	High Priority		

ProjectID	Title	Sponsor	Subbasin	Technical Criteria								Management Criteria							Project Review Comments	CBFWA Category	
				T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	M 1	M 2	M 3	M 4	M 5	M 6	M 7			
29028	Fabricate and Install Three New Fish Screens on Wenatchee River Diversions	Washington Department of Fish and Wildlife, Yakima Screen Shop	Wenatchee	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	These are important diversions that need to be screened. There is no cost share represented in the proposed budget. The budget should be reduced by 15% in order to encourage cost share by the landowners or other responsible parties. A contingency of \$17,381 is identified in the proposal. These funds should be removed from the proposal. The budget has been modified to reflect these changes. NMFS has identified this project as a BiOp project.	High Priority
29039	The effects of fine sediment on the hyporheic zone: monitoring and evaluating the influence of hyporheic exchange flows on stream temperature.	United States Forest Service - Pacific Northwest Research Station	Wenatchee	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Objectives need to be clarified. NMFS has identified this project as a BiOp project.	Recommended Action
29053	Icicle/Wenatchee Habitat Acquisition	Chelan-Douglas Land Trust	Wenatchee	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Appraisal price will likely be less than budget amount. Encourage cost share. Potential lost opportunity. The review group would like to see alternative strategies for acquiring this property (cost share, riparian parcels only, conservation easements). This project received \$1,337,800 from the WA SRFB for 2003. The budget has been adjusted by the project sponsor to reflect this. NMFS has identified this project as a BiOp project.	High Priority

Appendix B. The CBFWA 3-Year Project Recommendations for Columbia Cascade Province

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
Columbia Upper Middle						
29009	Acquire Dole-Beebe Property and Associated Water Rights	Washington Department of Fish and Wildlife	Columbia Upper Middle	\$396,500	\$23,200	\$10,000
29024	Analysis of multiple land uses and their effects to shrub-steppe habitat and wildlife species, such as roads, patterns of development and agriculture.	Douglas County	Columbia Upper Middle	\$320,000	\$61,000	\$35,000
29025	Columbia Cascade Province Pump Screening	Washington Department of Fish and Wildlife, Yakima Screen Shop	Columbia Upper Middle	\$218,918	\$232,408	\$232,408
29037	Ecosystem Diagnosis and Treatment in the Columbia Cascade Province	Washington Department of Fish and Wildlife, Yakama Nation, Confederated Tribes of the Colville Reservation	Columbia Upper Middle	\$500,000	\$150,000	\$150,000
29041	Evaluate Distribution, Abundance, Genetic Structure, and Habitat Use of Bull Trout Populations in the Columbia Cascade Province	U.S. Fish and Wildlife Service, Wenatchee Office	Columbia Upper Middle	\$186,366	\$282,800	\$80,976
29043	SSHIAP - Columbia Cascade Province	Washington Department of Fish and Wildlife	Columbia Upper Middle	\$390,000	\$50,000	\$50,000
29052	Spatial and Temporal Occurrence of Salmonid Pathogens in the Upper Middle Mainstem Subbasin of the Columbia Cascade Province	Washington State University	Columbia Upper Middle	\$220,832	\$255,145	\$263,107

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
29055	Columbia Cascade Water Rights Acquisition	Washington Department of Ecology	Columbia Upper Middle	\$154,875	\$534,875	\$534,875
Entiat						
29014	The Effects of Impoundment on Fish and Amphibian Habitat Use in Eastern Washington	Washington Department of Fish and Wildlife	Entiat	\$106,187	\$164,858	\$170,620
29026	Hanan-Detwiler Passage Improvements	Washington Department of Fish and Wildlife, Yakima Screen Shop	Entiat	\$85,000	\$5,000	\$5,000
Methow						
29002	Conjunctive Use and River Enhancement (CURE) for Habitat Improvement in the Upper Methow River	Chewuch Basin Council, Methow Salmon Recovery Foundation (co-sponsor), Confederated Colville Tribes (co-sponsor)	Methow	\$500,000		\$220,000
29006	Supplement Spring Chinook in Early Winters Creek	Methow Salmon Recovery Foundation, Chewuch Basin Council (co-sponsor), Colville Confederated Tribes (co-sponsor), Yakima Indian Nation (co-sponsor), Washington Department of Fish and Wildlife (co-sponsor)	Methow	\$231,000	\$5,000	\$5,000
29010	Restore Passage on Private Lands in Beaver Creek Drainage to Benefit Spring Chinook, Steelhead and Bulltrout	Washington Department of Fish and Wildlife	Methow	\$0	\$191,819	\$153,455
29012	Replace Rockview Diversion with Groundwater Withdrawal and Restore Instream Habitat	Washington Department of Fish and Wildlife	Methow	\$91,954	\$92,000	\$42,500

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
29018	Analyze ground-water and surface-water exchanges influencing anadromous salmonid habitat in the Methow River and its major tributaries	U.S. Geological Survey, Water Resources Discipline, Washington District	Methow	\$188,937	\$58,712	
29020	Beaver CR Campground Rehabilitation	Okanogan Conservation District	Methow	\$60,445	\$5,325	\$5,325
29030	Early life history and survival of spring chinook salmon and steelhead in the Methow River Basin	Pacific Northwest National Laboratory	Methow	\$382,939	\$384,000	\$384,000
29031	Out Year Operations and Maintenance Costs Required to Implement/Carry out MVID Rehabilitation Project	Yakama Nation	Methow		\$70,000	\$65,000
29034	Life History Study of Salmonid Rearing In The Upper Methow River	Yakama Nation	Methow	\$273,710	\$210,166	\$215,213
29036	Ali Long Rearing Channel Habitat Improvements- Upper Methow River	Yakama Nation	Methow	\$58,500	\$12,250	\$6,250
29038	Supplement Summer Steelhead Eightmile Creek/Chewuch River	Methow Salmon Recovery Foundation, Chewuch Basin Council (co-sponsor), Colville Confederated Tribes (co-sponsor), Yakama Nation (co-sponsor), Washington Department of Fish and Wildlife (co-sponsor)	Methow	\$205,000	\$5,000	\$5,000
29044	Protecting Habitat on Private Lands in the Methow Watershed	Methow Conservancy	Methow	\$200,000	\$200,000	\$200,000

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
29046	Develop a Coordinated Resource Management Plan for Beaver Creek and plan and implement habitat restoration activities.	Okanogan Conservation District, Colville Confederated Tribes (co-sponsor)	Methow	\$24,458	\$21,000	\$26,000
Okanogan						
29001	Evaluation of 1872 Water Rights to Supplement Flows Between Basins	Confederated Tribes of the Colville Reservation	Okanogan	\$39,000	\$51,000	\$57,000
29003	Acquire Property for Partial Wildlife mitigation	Confederated Tribes of the Colville Reservation	Okanogan	\$1,000,000	\$1,500,000	\$1,500,000
29004	Control Okanogan Weeds -Invasive Species Project	Confederated Tribes of the Colville Reservation	Okanogan	\$299,933	\$296,023	\$296,023
29005	Validate Occurrence and Assess Abundance of Wildlife Species	Confederated Tribes of the Colville Reservation	Okanogan	\$194,136	\$172,636	\$168,136
29007	Okanogan Kelt Reconditioning	Confederated Confederated Tribes	Okanogan	\$151,387	\$127,819	\$127,819
29008	Adult Passage Counting and Trapping at Zosel Dam	Colville Confederated Tribes	Okanogan	\$108,474	\$440,000	\$75,000
29011	Sharp-tailed Grouse and Mule Deer Habitat Restoration and Enhancement on Sinlahekin Wildlife Area	Washington Department of Fish and Wildlife	Okanogan	\$135,492	\$180,000	\$342,000
29013	Acquire Land Adjacent to Chiliwist Creek and Develop Summer Chinook and Summer Steelhead Acclimation Pond	Washington Department of Fish and Wildlife	Okanogan	\$447,470	\$65,000	#REF!
29015	Thermal Imaging and Total Maximum Daily Load (TMDL) Development on the Okanogan Subbasin.	Colville Confederated Tribes	Okanogan	\$111,904	\$65,000	

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
29016	Return of Okanogan Sockeye Salmon to their historic range.	Colville Confederated Tribes/Okanogan Nation Fisheries Commission	Okanogan	\$175,000	\$955,500	\$20,000
29017	Prepare a Master Plan for Protecting and Restoring Salmon Habitat in Okanogan River	Colville Confederated Tribes/Okanogan Nation Fisheries Commission	Okanogan	\$59,000		
29019	Characterize and Assess Wildlife-Habitat Types and Structural Conditions for Okanogan sub-basin	Northwest Habitat Institute and the Colville Confederated Tribes	Okanogan	\$27,907		
29021	Develop a Physical Processes Method (PPM) to Supplement Habitat Conditions Analysis and Subbasin Planning	Golder Associates Inc.	Okanogan	\$295,229	\$368,064	\$473,659
29022	Omak Creek Water Temperature Model	Confederated Tribes of the Colville Reservation	Okanogan	\$245,000	\$50,000	\$50,000
29023	Restoration/Protection of Kartar Creek In-stream, riparian, and Wetland Habitats	Colville Confederated Tribes, Fish and Wildlife Department	Okanogan	\$86,729	\$79,729	\$87,729
29029	Perform Range Forage Inventory for Large Ungulates	Confederated Tribes of the Colville Reservation	Okanogan	\$159,704	\$151,274	\$151,274
29032	Okanogan Basin Water Strategy Development and Pilot Projects	Confederated Tribes of the Colville Reservation/Okanogan County	Okanogan	\$166,920	\$99,420	\$186,420
29033	Design and Conduct Monitoring and Evaluation Associated With Reestablishment of Okanogan Basin Natural Production	Confederated Tribes of the Colville Reservation	Okanogan	\$480,152	\$763,482	\$378,343

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
29035	Okanogan River Riparian and Upland Fish and Wildlife Habitat Acquisition	Stewardship Partners, formerly Resource Action Council	Okanogan	\$2,957,000	\$2,988,000	\$90,000
29040	OK-11 Develop and Propagate Local Okanogan River Summer/Fall Chinook	Confederated Tribes of the Colville Reservation	Okanogan	\$402,000	\$316,500	\$193,500
29042	Selective Fish Collection and Harvesting	Confederated Tribes of the Colville Reservation	Okanogan	\$166,000	\$155,000	\$125,000
29045	Protect and Restore Salmon and Steelhead Habitat at the Similkameen/Okanogan River Confluence	Upper Columbia Regional Fisheries Enhancement Group, co-sponsors: U.S. Fish and Wildlife Service	Okanogan	\$0	\$305,059	\$251,275
29050	Phase I Okanogan River Spring Chinook Production	Confederated Tribes of the Colville Reservation	Okanogan	\$112,000	\$377,000	\$476,000
29051	Develop Local Okanogan River Steelhead Brood Stock	Confederated Tribes of the Colville Reservation	Okanogan	\$122,000	\$105,000	\$1,030,000
29054	Stream Gaging Installation and Operations	Department of Ecology	Okanogan	\$150,000	\$150,000	
199604200	Restore and Enhance Anadromous Fish Populations and Habitat in Salmon Creek	Colville Confederated Tribes	Okanogan	\$1,300,000	\$2,109,375	\$1,884,375
199609400	Increase sharp-tailed grouse and mule deer populations and enhance shrubsteppe/riparian habitats on the Scotch Creek Wildlife Area.	Washington Department of Fish and Wildlife	Okanogan	\$408,401	\$352,420	\$405,420
200000100	Improvement of Anadromous Fish Habitat and Passage in Omak Creek	Colville Confederate Tribes	Okanogan	\$122,717	\$120,000	\$120,000

ProjectID	Title	Sponsor	Subbasin	Total of 2003	Total of 2004	Total of 2005
200001300	Evaluate An Experimental Re-introduction of Sockeye Salmon into Skaha Lake	Colville Confederate Tribes	Okanogan	\$18,096		
Wenatchee						
29027	Comprehensive Inventory and Prioritization of Fish Passage and Screening Problems in the Wenatchee and Entiat Subbasins	Washington Department of Fish and Wildlife, Yakima Screen Shop	Wenatchee	\$277,436	\$277,436	\$277,436
29028	Fabricate and Install Three New Fish Screens on Wenatchee River Diversions	Washington Department of Fish and Wildlife, Yakima Screen Shop	Wenatchee	\$184,976	\$13,500	\$13,845
29039	The effects of fine sediment on the hyporheic zone: monitoring and evaluating the influence of hyporheic exchange flows on stream temperature.	United States Forest Service - Pacific Northwest Research Station	Wenatchee	\$102,039	\$106,121	\$110,365
29053	Icicle/Wenatchee Habitat Acquisition	Chelan-Douglas Land Trust	Wenatchee	\$257,500	\$79,000	\$26,000
199604000	Evaluate The Feasibility And Risks Of Coho Reintroduction In Mid-Columbia	Yakama Nation	Wenatchee	\$2,195,191	\$2,269,828	\$2,347,002
200000200	Final Phase of the Chumstick Culvert Replacement and Habitat Restoration Enhancement	Chelan County Conservation District	Wenatchee	\$0	\$53,850	\$2,700