



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
525 NE Oregon Street
PORTLAND, OREGON 97232-2737

F/NWR5

October 1, 2001



Doug Marker
Acting Director, Fish & Wildlife Division
Northwest Power Planning Council
851 SW 6th Avenue, Suite 1100
Portland, OR 97204-1348

Re: NMFS' Review of Fish and Wildlife Program Proposals for the Columbia Plateau
Province

Dear Mr. ^{Doug}Marker:

In a September 19, 2001, letter to you and others, I outlined the National Marine Fisheries Service's (NMFS) process for reviewing proposals submitted to the Bonneville Power Administration (BPA) through the Northwest Power Planning Council's (Council) provincial review process. Briefly, NMFS will be coordinating our comments on prioritization of projects with our co-managers through the Columbia Basin Fish and Wildlife Authority (CBFWA). Additionally, we will provide all interested parties with our assessment of the relationship between each proposal and the requirements of the December 2000 Federal Columbia River Power System biological opinion (2000 FCRPS Opinion). My September 19 letter outlined four questions that we will address in order to determine whether a project is called for (specifically or generically) and thus may implement (in whole or part) one of the "reasonable and prudent alternative" action items in the 2000 FCRPS Opinion.

This letter transmits our assessment of the projects submitted for the Columbia Plateau Province. Enclosure 1 is a table addressing each of the four questions described above. NMFS is providing this to the Council to assist it in developing funding recommendations to BPA, per your recent request to my staff. We assume that you will consider the information in this table complementary to the Independent Scientific Review Panel's (ISRP) report and to the comments that you have received from CBFWA. Enclosure 2 explains some of the codes and criteria applied in this table. If you have any questions regarding interpretation of the table, please contact Dr. Chris Toole of my staff (Chris.Toole@noaa.gov, 503-230-5410).

My September 19 letter also stated that, "to the extent that we identify any gaps in the range of proposed and/or funded projects, they will be addressed in subsequent correspondence with BPA and the other action agencies." We are currently preparing a letter that will identify those requirements of the 2000 FCRPS Opinion for which proposals are lacking relative to the Columbia Plateau Province and we will be happy to provide this to the Council as soon as it is complete.



Thank you for the opportunity to review the Columbia Plateau Province proposals. I hope that this review, coupled with information from the ISRP and CBFWA, will provide a useful context for making your funding recommendations to BPA.

Sincerely,

A handwritten signature in black ink that reads "Brian J. Brown". The signature is written in a cursive style with a large, prominent "B" at the beginning.

Brian J. Brown
Assistant Regional Administrator
Hydro Program

Enclosures

cc: Sarah McNary, BPA
Brian Allee, CBFWA
Doug Arndt, COE
Dr. Ron McKown, BOR
Fred Olney, USFWS

Enclosure 1. Relationship of proposed Columbia Plateau Province projects to the reasonable and prudent alternative (RPA) of NMFS' 2000 FCRPS Opinion. See cover letter and Enclosure 2 for details.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25001	Acquire Sharp-tailed Grouse Habitat at the Swanson Lakes Wildlife Area	0	N/A	N/A	N/A	no	
25002	Protect, Enhance, and Maintain Habitat on the Sunnyside Wildlife Area to Benefit Wildlife and Fish Assemblages.	0	N/A	N/A	no	no	
25003	FORREST RANCH ACQUISITION	150	MCR SH, MCR SCH	Project will acquire approximately 4,295 acres of sensitive land, 12.2 miles of streams, 25.2 cfs of senior water rights and structures on the Middle Fork & Upper Mainstem John Day Rivers making a large marginal contribution to spawning anadromous riparian habitat on the Upper Middle Fork of the John Day River.	no	yes	Significant, sensitive land. Identified through local assessments. NMFS supported in High Priority reviews. Risks to habitat of NOT funding the project are high. Property purchase was funded through the High Priority Process.
25004	Acquisition of Wagner Ranch	150	MCR SH, MCR SCH	Purchase of property will provide opportunities for riparian improvements along 10.2 contiguous miles of mainstem river frontage that serves as a migration corridor for chinook & steelhead.	no	yes	Significant, sensitive land. Identified through local assessments. Grazing rights are included in the property purchase. NMFS supported in High Priority reviews. Risks to habitat of NOT funding the project are high. Property purchase was funded through the High Priority Process.
25005	Bighorn Sheep reintroduction to the Warm Springs Reservation	0	N/A	N/A	N/A	no	
25006	Provide Coordination and Technical Assistance to Watershed Councils and Individuals in Sherman County, Oregon	400(153)	MCR SH, MCR SCH	Indirect -- Proposal requests staffing to coordinate & perform activities that are performed by watershed councils. Activities should be funded through the USDA -- this raises an in-lieu issue. Assurance of fisheries benefits to target species?	no	yes	Proposal would provide staffing to help watershed councils implement conservation projects with agricultural landowners. Predominance of agricultural use of the land means that conservation plans must fit within the overall operating plan for agricultural enterprise. Project would produce resource management plans that would be implemented with cost-sharing from state and Federal agencies. The new FTE would replace services that were formerly contracted or provided in-kind by NRCS. Proposal needs to clarify whether planned personnel would also help landowners to prepare paperwork to establish CRP & CREP proposals for streamside buffers or to take upland cropland out of production. Need M&E to evaluate success of project.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25007	Determine lamprey species composition, larval distribution and adult abundance in the Deschutes Subbasin	0	N/A	N/A	N/A	no	
25008	Resident Fish Stock Status in the Palouse River and Upper Crab Creek Watersheds, Washington.	0	N/A	N/A	N/A	no	
25009	Assess Watershed Health and Coordinate Watershed Councils in Wasco County, Oregon	154	MCR SCH, MCR STHD, STHD-U, CHN, U, WTR-STHD-U	Indirect -- Project will conduct watershed assessments on White River, Wapinitia and Nena Creek assessment in Lower Deschutes Subbasin & provide watershed council support to five watersheds in Wasco County, Oregon.	no	yes	One component of this proposal is a request for an FTE to coordinate subbasin planning/assessments - activities may already be performed by watershed councils. Should USDA fund the FTE? Objective 3 & the Fifteen Mile Creek portion of Objective 5 should not be funded since it's associated with the Columbia Gorge Province.
25010	Regional Stream Conditions and Stressor Evaluation	154	MCR SH, MCR SCH, COHO-U	Indirect -- Project intends to evaluate status and trends of key factors limiting listed species within subbasins by developing a statistically based model to characterize baseline conditions and identify conditions at regional reference sites.	no	yes	Statistically based baseline data on salmonid habitat in John Day, Umatilla, and Deschutes subbasins. Some of the data that would be collected through this project may exist & recommend that existing data be reviewed to avoid duplicative actions. Although project is coordinated with #199801600, additional coordination needs to occur with #25069 and #25088b. Suggest that funding be delayed until coordination will insure data overlaps will be minimized. Coordination within proposed subbasins among the F&W co-managers should be a pre-requisite for funding this project.
25011	Assess Riparian Condition Through Spectrometric Imaging Of Riparian Vegetation	155	MCR SH, MCR SCH	Indirect effect since the project is high resolution digitizing of existing riparian vegetation and stream morphometrics at 1:5000.	no	yes	Mainstem project aggregates existing data and generates sample estimates based on that data.
25012	Assessment of bull trout populations in the Yakima River watershed.	0	N/A	N/A	N/A	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25013	Restore Riparian Corridor at Tapteal Bend, Lower Yakima River	500	MCR SH, MCR SCH	Project would reduce stream bank erosion and provide some riparian vegetation.	no	yes	Extremely difficult to assign any benefit to listed esu. The project addresses sediment primarily, although the proposal describes a numerous other adverse conditions. Is sedimentation the factor most limiting salmonids in this area? Most of cost is to stabilize a stream bank, protecting a greenway. The previous purchase of land for habitat and aesthetic values was good idea. This project appears to address symptoms of degradation rather than the underlying causes. It does request funds for a land assessment as a precursor to buying a small island in the river. High potential for public outreach.
25014	Establish Riparian Buffer Systems	500(153)	MCR SH, MCR SCH, FALL CHN-U	Project will implement riparian buffer systems using cost share provided by USDA, State of Oregon, and private landowners.	no	yes	Project will implement RPA 153 only if permanent or long term easement. Support if permanent easement, or at least > 15 years. Easement should be consistent with Oregon CREP. This project needs to be implemented consistent with limiting factors & problem locations identified in subbasin summaries & and eventually subbasin planning to ensure fisheries benefits to target species.
25015	Emergency Flow Augmentation for Buck Hollow	149	MCR SH	Project will augment stream flow in Buck Hollow Creek during 2001 with 1-1.5 cfs from headwater well to protect steelhead redds.	no	yes	Project is time critical for summer 2001. Funded under emergency offset BIOP.
25016	Assessment of habitat improvement actions on water temperature, streamflow, physical habitat, & aquatic community health in the Birch Creek Watershed	154	MCR SH	Indirect effect since the proposal suggests a process-oriented model based on detailed physical data collection.	no	yes	Good proposal in technical aspects, although lacks links to the Subbasin Summary, FWP and BiOp. Project proponents need to explain how a quantitative assessment of benthic macro-invertebrates will provide a better understanding of how "primary food production" relate to riverine fish production? Furthermore, proposal suggests a process-oriented model based on detailed physical data collection as opposed to a "preferred" and likely less expensive approach of measuring key response variables in a control versus treatment experiment.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25017	Fabricate and Install New Huntsville Mill Fish Screen	500	MCR SH, MCR SCH	The Huntsville Mill fish screen facility, which was originally constructed in 1957 and modified in 1969, does not meet NMFS and WDFW fish screen standards. This site is oriented 90 degrees to flow, does not provide sufficient drum screen submergence for self-cleaning, has approach velocities that exceed current criteria, and does not guide fish safely through the facility and back to the river. New screens would correct these problems.	no	yes	Most of the larger diversions in the mainstem Walla Walla area have been identified for future improvements. One of the exceptions is the Huntsville Mill site, which is a City of Walla Walla water supply intake, and is one of the largest diversion in terms of flow in the upper Touchet River water shed.
25019	Tucannon River Roads, Cut and Fill Slope Restoration	400	SR FCH, SR SSCH, SR SH	May reduce sediment	no	yes	
25020	Acquire Rattlesnake Slope Addition	0	N/A	N/A	no	no	
25021	Implement Actions to Reduce Water Temperatures in the Teanaway Basin	400	MCR SH, MCR SCH, COHO-U	Project could help lower summer water temperatures and improve riparian function, and increase instream flows in the Teanaway River, one of the few Upper Yakima tributaries known to support mid-Columbia sthd.	no	yes	Stream bank stabilization piece (that involving rock) should not be implemented. Instream flow improvements, while modest will help the system. Riparian easements should be part of program and should follow at least CREP standards.
25022	YKFP Big Creek Passage & Screening	500	MCR SH, MCR SCH	Project would provide passage for sthd, spr chinook and potentially coho into Big Creek. Big Creek is a substantial upper Yakima Tributary containing very high quality sthd habitat.	no	yes	Relatively low cost for restoration of anadromy to high quality, unregulated habitat.
25023	Yakima-Klickitat Fisheries Project - Manastash Creek Fish Passage and Screening	500	MCR SH, MCR SCH	Project would provide passage, screens and flow improvements into Manastash Creek. Upper Yakima sthd are excluded from most tributaries, including Manastash Creek by irrigation. Restoring passage into such tributaries is believed to be an essential feature of sthd recovery in the Yakima.	no	yes	Pending lawsuit over lack of screens and passage. Substantial benefits if passage problems can resolved.
25024	Yakima-Klickitat Fisheries Project - WILSON CREEK SNOWDEN PARCEL ACQUISITION	150	MCR SH, MCR SCH	Acquisition would protect parcel of land in lower Wilsons Creek, a stream in which passage is being restored. If not protected, parcel will likely be developed in very near future.	no	yes	Acquisition compliments significant other habitat investments in same creek system.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25025	YKFP -- Secure Salmonid Spawning and Rearing Habitat on the Upper Yakima River	150	MCR SH, MCR SCH	Acquisitions include some valuable, at risk salmonid habitat. Two of the parcels are in key anadromous production areas and contain good quality riparian habitats and floodplain features.	no	yes	500,000 of project costs will benefit bull trout. Parcels are essentially functional "as is".
25026	Yakima Tributary Access and Habitat Program (YTAHP)	500	MCR SH, MCR SCH	ambitious project to screen and provide passage over hundreds of unscreened diversions in the Kittitas Valley. Steelhead may benefit greatly by gaining safe access to the Wilson/Nanum system. It is unclear, however, if the proposal will be able to ensure that all diversions in newly accessible reaches will be screened.	no	yes	Project may be too ambitious in early phases. Suggest partnering with YIN on their Wilson Creek project, and developing an implementation plan in concert with basin fish managers.
25027	An Assessment of Neotropical Migratory and Resident Bird-Habitat & Bird-Salmon Relationships in Riparian Ecosystems in the Deschutes Subbasin	0	N/A	N/A	N/A	no	
25028	John Day Upland Restoration	0	NA	Upland project focused on vegetation management stabilizing upland soil erosion.	yes	no	Only \$4000 could be construed as riparian restoration and that is compliance monitoring of USFS timber harvest from another BiOp
25029	Westland-Ramos Fish Passage and Habitat Restoration Pilot Project	500	MCR SH, MCR SCH, FALL CHN-U, COHO-U	Enhance upstream migration of 'late returning summer steelhead', spring chinook, fall chinook, and coho. Timing for these fish is critical; migration delay & repeated attempts to negotiate the structure may promote pre-spawn mortality, impact distances migrated, & influence selection of spawning sites.	no	yes	Excellent proposal that addresses removal of barriers that cause excessive delay or serious injury of migrating anadromous salmonids that can increase vulnerability of stocks. Project intends to overcome a major impediment to passage associated with bedload transport problems at a major diversion in the Umatilla River. Proposal reflects a great deal of preparatory work by the proponent to develop plans for a much needed project and obtain broad acceptance by affected stakeholders in irrigated agriculture as well as fisheries. Good cost-sharing & interrelationship with related projects.
25030	Factors limiting the shrubsteppe raptor community in the Columbia Plateau Province of eastern Washington	0	N/A	N/A	N/A	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25031	Naches River Water Treatment Plant Intake Screening Project.	500	MCR SH, MCR SCH	Project would prevent entrainment of juvenile sthd into city intake when city of Yakima is diverting water from Naches River rather than diverting from power canal	no	yes	Most of the cost is to increase security of City water supply by diverting water upstream of canal discharge. Canal is bordered by orchard and City is concerned about potential chemical contamination of water supply. If focus is fish, BPA funds should cover only the installation of screens, not other retrofits.
25032	Wenas Wildlife Area Inholding Acquisitions	150	N/A	Proposed acquisitions are too far removed from anadromous fish presence to make an argument that they would benefit from purchase. Substantial terrestrial and aesthetic benefits to purchase.	no	no	good terrestrial, resident fish benefits
25033	Evaluate Restoration Potential of Mainstem Habitat for Anadromous Salmonids in the Columbia and Snake Rivers	155	SR FCH	Indirect effect since project would identify mainstem habitat sampling reaches, collect baseline data on habitat conditions, identify opportunities for mimicking the range and diversity of historic habitat conditions, develop improvement recommendations for mainstem reaches.	no	yes	Largely RM&E comparing mainstem habitat characteristics of reference sites with sample sites.
25034	Develop a Nutrient/Food-Web Management Tool for Watershed-River Systems	0	MCR SCH, MCR SH	This model has the potential in the future to improve implementation of nutrient enhancement studies and programs at the subbasin scale, by modeling nutrient availability under a variety of conditions. However, the current data available to support such a model are extremely limited; therefore its potential for immediate or even short-term benefit is limited. (see also, comments).	no	no	Model at this point will be almost entirely theoretical; data collection and studies of nutrient enhancement should be conducted first, in order to make this a much more useful project.
25035	Evaluate adult fall chinook salmon fallback at Priest Rapids Dam, Columbia River	0	UCR SFCH	N/A (for RPA ESUs)	NA	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25036	The Impact of Flow Regulation on Riparian Cottonwood Ecosystems in the Yakima River Basin.	183	MCR SH, MCR SCH	Project will further understanding of how flow management in the Yakima affects riparian forest conditions. Effort would advance the understanding of the ecology of alluvial reaches in the Columbia River Basin & quantify key relationships between flow regulation, geomorphic activity, cottonwood rescruiement and the recovery of riparian-dependent wildlife, salmon, & other native fish.	no	yes	Proposal was developed based on a BPA Innovative Projects Program that was initiated to study the impact of regulated flows on riparian cottonwoods in the Yakima River Basin. The project would research riparian cottonwood & geomorphic response to regulated flows in the Yakima Basin and compare to the responses of an unregulated reach of the Flathead River with the objective of enhancing flows to restore riparian habitats in the Yakima Basin.
25037	Evaluation of the effects of American shad on upstream migration of anadromous fishes at Priest Rapids Dam	0	UCR SFCH, OR SOCK, LW SOCK	The goal is to determine whether the non-indigenous American shad attempting to pass Priest Rapids Dam negatively impact upstream passage of adult anadromous fishes. Methods to reduce possible impacts will also be explored.	NA	no	There was little or no basis provided in the proposal to show that a significant problem exists.
25038	Effects of Hydropower Operations on Fall Chinook Spawning Activity	0	UCR SFCH	Assess the relationship between hydropower project operations and spawning activity of fall chinook salmon in dam tailrace areas. Develop a data set of 24 h/day spawning activity to be regressed against daylight and project discharge data.	NA	no	The need for this project is not adequately justified. Benefits to the fish are not well demonstrated.
25039	Effects of agricultural conversion on shrubsteppe wildlife and condition of extant shrubsteppe habitat	0	N/A	N/A	N/A	no	
25040	Collection of baseline measurements of flow, temperature, channel morphology, riparian condition, and benthic macroinvertebrates, Trout Creek, Oregon	154	MCR SH	Project would measure physical & ecological habitat conditions prior to a channel restoration project, thus enabling future quantitative evaluation of processes & conditions affected by channel restoration.	no	yes	M&E project? Since project would provide pre-implementation baseline data before Corps berms are removed, and perform evaluations that are more fine scale than the other Trout Creek projects, recommend coordinating the Trout Creek projects through an "umbrella" approach. Also, question of funding opportunity -- does the Corps have authority to collect of baseline data to support an assessment of the success of restoration actions associated with a Corps project?

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25041	Wildlife Escape Ramps	0	N/A	N/A	N/A	no	
25042	pygmy rabbit recovery - captive breeding	0	N/A	N/A	N/A	no	
25043	Northern Leopard Frog Distribution and Habitat Association	0	N/A	N/A	N/A	no	
25044	Application of Biological Assessment Protocol to Evaluate Passage of Juvenile Salmonids Through Culverts in the Yakima Basin	500	LCSW COHO, MCR SH, MCR SCH	Indirect effect. Project will apply laboratory developed protocol for assessing juvenile salmonid passage through roadway culverts.	no	yes	Difficult to assess. Could this be combined with work done by the WDFW?
25045	Determine effects of water level induced changes in rearing habitat on the survival of juvenile fall chinook salmon.	0	UCR SFCH	The ultimate goal of this project is to increase the understanding of juvenile fall chinook salmon use of near shore habitats.	NA	no	This project studies unlisted fish with intent to extrapolate to listed stocks. The project is innovative but is based on untested technology.
25046	A cooperative approach to evaluating avian and mammalian responses to shrubsteppe restoration in the Crab Creek Subbasin	0	N/A	N/A	N/A	no	
25047	Morrow County Buffer Initiative	400(153)	MCR SH	Project will implement riparian buffer program using cost share provided by USDA, State of Oregon, and private landowners	no	yes	Project will implement RPA 153 only if permanent or long term easement. Support if permanent easement, or at least > 15 years. Easement should be consistent with Oregon CREP. This project needs to be implemented consistent with limiting factors & problem locations identified in subbasin summaries & and eventually subbasin planning to ensure fisheries benefits to target species.
25048	Accelerate the Application of Riparian Buffers in the Upper Deschutes Subbasin	400(153)	MCR SH	Project will implement riparian buffer program using cost share provided by USDA, State of Oregon, and private landowners	no	yes	Project will implement RPA 153 only if permanent or long term easement. Support if permanent easement, or at least > 15 years. Easement should be consistent with Oregon CREP. This project needs to be implemented consistent with limiting factors & problem locations identified in subbasin summaries & and eventually subbasin planning to ensure fisheries benefits to target species.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25049	Numerically Simulating the Hydrodynamic and Water Quality Environment for Migrating Salmon in the Lower Snake River	141, 143	MULTIPLE	Potential to improve reservoir operations for migrating juveniles - Potentially Snake River ESU's	no	yes	Understanding the spatial and temporal dynamics of water temp in the LGR pool and the effects of reservoir operations on listed stocks has been a concern in the region and discussed by the WQT. "MULTIPLE" refers to 4 SR ESUs.
25050	Provide Incentives to convert to direct seed/no-till farming in Sherman County, Oregon	400(153)	MCR SH	Project will permit SWCD to provide incentive for two of three crop years for farmers to convert to no-till/direct seed farming to improve watershed hydrology and reduce sedimentation. Conservation Plans will be written by SWCD or NRCS personnel.	no	yes	Project needs an agricultural economist as part of the research team who will be responsible for the design and conduct of the experiment regarding the economic viability of no-till farming -- the project as currently designed is not a rigorous analysis of the economic & biological benefits of converting farming practices to no-till. Better if could feed into an adaptive management loop.
25051	Columbia Plateau Natural Resources Collaborative (CPNRC)	154	MCR SH, MCR SCH, CHO-U	Establish collaborative process to provide assistance to local watershed groups on subbasin planning, ESA/CWA integration, and implementation funding to facilitate conservation application to restore salmon and water quality on private lands.	no	yes	Proposal would establish a cooperative multi-Federal agency group to provide planning & technical assistance to agricultural landowners thru existing local conservation partnerships for the purpose of accelerating the implementation of conservation activities. The idea is to establish a single planning process that would streamline all the various regulatory requirements. There are a number of established venues within which this issue could be dealt. Proposal requests a significant amount of money (\$823K) for coordination for subbasin planning/assessments for the John Day Subbasin, are these activities already performed by watershed councils and other established groups in this subbasin?

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25052	Sex Reversal in Hanford Reach Fall Chinook Salmon	0	UCR SFCH	N/A (for RPA ESUs)	N/A	no	Potential for future funding, wait until ongoing studies are completed or summarized.
25053	Evaluate bull trout movements in the Tucannon and Lower Snake rivers	0	N/A	N/A	N/A	no	
25054	Increase Naches River In-Stream Flows By Purchasing Wapatox Hydroelectric Project	500	MCR SH, MCR SCH, COHO-U	Project would substantially increase instream flows in August and during the winter in an eight mile long reach of the Naches River, thereby enhancing spawning & rearing habitat	no	yes	Project was funded under the spill mitigation action plan.
25055	Echo Meadows Artificial Recharge Extended Groundwater and Surface Water Modeling	0	MCR SH, MCR SCH	Assess impacts of artificial recharge design on stream temperature, effluent chemistry, and pulse duration. No direct benefit to ESU.	no	no	Well-written proposal for groundwater & surface water modeling associated with the Echo Meadows test of groundwater recharge using an irrigation system.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25056	Conduct Watershed Assessments for Priority Watersheds on Private Lands in the Columbia Plateau	154	MULTIPLE	Identify opportunities for improving anadromous fish survival and/or distribution at the watershed scale, by compiling relevant habitat information.	no	yes	Use of Oregon's watershed assessment protocol. Budget needs better justification, would like to see explicit links to other assessment processes and recovery efforts. Unclear if all landowners are participants.
25058	Fish Passage Inventory and Corrective Actions on WDFW Lands in The Yakima Subbasin	154	MCR SH, MCR SCH	Project would potentially provide anadromous passage to additional habitats on WDFW lands	no	yes	Costs are very high. WDFW may already be aware of passage problems on their lands. Each of the listed areas has management staff assigned and competent to conduct the survey. Proposal would be stronger if came forward with proposals to fix or design fixes to problems identified in survey. No anadromous fish above the Wenas Dam in that the Wenas wildlife area, benefit to salmonids in this area unclear.
25059	Develop Progeny Marker for Salmonids to Evaluate Supplementation	184	MCR SH	If successful, project would allow determination of hatchery fish spawning rates in the Umatilla subbasin, by marking hatchery fish with a chemical marker. This would provide a method to assess wild population status more robustly (resolving an important uncertainty.) See comments.	no	yes	IF this works (see ISRP comments), this has the potential to be a useful tool, if two conditions are met 1) there should be some benefit to this method over molecular methods -- molecular data can provide more information than this method, and those techniques are already developed. Unless this proposed method is cheaper, easier, etc., it would be better to focus on those molecular techniques. Priority should not be given to this project until some benefit is demonstrated. 2) ALL hatchery fish must be marked, or this method will not produce useful results.
25060	Burbank Sloughs and Mainstem Columbia River Shoreline/Side Channel/Wetland Habitat Restoration	400	MULTIPLE, FCH-U	By restoring slough/off-channel habitat, breach road, berms, & replacing culverts, this project could serve as a pilot project to restore wintering/rearing habitat for chinook, & secondarily steelhead, in seven sloughs.	no	yes	Proposal allies itself with a number of RPA actions and is certainly consistent with the BiOp objectives, however the intended action is a collection of restoration actions which are not developed to implement specific RPAs. The effort will be of most benefit if anadromous fish rearing habitat is currently in short supply, and if the new habitat does not increase predation (especially piscine). Is this habitat limiting to these ESUs? At a minimum, would affect UCR SCH, UCR SH, MCR SH, SR SH.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25061	John Day Fish Passage Barrier Inventory	154	MCR SH, MCR SCH	This project provides staff to conduct a basin-wide inventory of potential barriers to fish passage.	no	yes	John Day is one of the best studied subbasins in this region. There is little or no detail in the proposal about how it would be carried out or why it does not duplicate similar inventories in the basin. Does it propose to fill gaps in existing database? This is a BoR priority subbasin, wouldn't this task fall under their obligation?
25062	Growth Rate Modulation in Spring Chinook Salmon Supplementation	184	MCR SCH	Project will investigate potential negative impacts of hatchery practices/releases on wild populations of chinook in the Yakima subbasin by conducting a rigorous experimental evaluation of growth rate modulation. Reducing uncertainty surrounding the effects of hatchery practices on wild populations will allow more effective recovery planning. Results from this study may be applicable to other ESUs as well.	yes	no	Well-designed research project; already underway; providing important information that will be applicable to listed ESUs. Already required by hatchery biop.
25063	Subbasin Planning Coordinator for Oregon	154	MCR SH, MCR SCH	Indirect effect since project would fund Oregon State Subbasin Planning Coordinator to represent state in NWPPC subbasin planning effort.	no	yes	Project proposes to develop a recovery strategy based on Oregon Plan. Would prefer that they coordinate with the All-H and TRT strategy and products. Unclear how much authority coordinator would have when representing state recovery efforts.
25064	Investigating passage of ESA-listed juvenile fall chinook salmon at Lower Granite Dam during winter when the fish bypass system is inoperable.	190	SR FCH	Will provide a greater understanding of migratory behavior for the entire Snake River Fall chinook ESU, using radio telemetry, scale analysis, molecular techniques and other methods. The information gained through this project has the potential to allow more effective operation of bypass systems for Snake River Fall Chinook.	no	yes	Fall chinook have low passage survival; this project will help determine how SR Fall chinook migratory behavior and bypass operations may interact to contribute to that low survival.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25065	Forward Looking Infrared Radiometry (FLIR) Thermal Imagery and Analysis of Tucannon River, Touchet River, and Mill Creek(FY2002)with follow-on 2003-04	183	MCR SH, MCR SCH	Results of project could be used to improve water temps for listed fish. No direct benefit, possible indirect benefits	no	yes	Water temp problems in WW are related to low flows, not additive sources. Project as proposed seems geared at identifying additive sources
25066	Manage Water Distribution in the Walla Walla River Basin	500	MCR SH, MCR SCH	Direct in-stream flow benefits are dubious given that the proposed project is to provide enhanced water measurement and management capabilities in the Walla Walla River at Milton-Freewater and would be dependent upon appropriate acquisition of water rights and transfer or lease of the rights instream. No water right acquisition/lease is proposed, nor does the proposal refer to any specific water right acquisition/leases proposed for the area (no reference to e.g., Proposal # 25082, although #25082 references #25066). If flows could be improved by project, benefits to fish would be proportional to flow improvement.	no	yes	The project is to provide resources needed by the Oregon Water Resources Department to ensure that water acquired to enhance streamflows is actually returned to streams. Proposal was persuasive that this sort of water monitoring and management is needed. However, the proposed might normally be accomplished under the agency's state mandate and funding.
25067	Manage Water Distribution in the John Day Basin	500	MCR SH, MCR SCH	Implement needed water measurement and monitoring improvements and increase water management as flow restoration projects and actions are implemented in the John Day.	no	yes	Proposal would provide the monitoring component that allows for the detection of non-compliance water withdrawal activities -- is the financial responsibility for this work that of the Oregon Water Resources Department? However, recommend funding individual installations & operations that will demonstrate benefits to target species throughout the system; recommend coordination with fish co-managers; and, recommend developing a detailed implementation plan demonstrating potential benefits during the 1st year, & begin installations in the 2nd & 3rd years.
25068	Rock Creek watershed road and riparian corridor improvement project.	400	MCR SH, MCR SCH	Project features installation of rock structures and road improvements to treat streambank erosion. Continuation of previous work. May reduce sediment and improve mesohabitat conditions	no	yes	Rock Creek is culturally significant to YIN. Past timber harvest, road construction and grazing have seriously altered watershed processes. Project does not resolve watershed function problems. Support riparian planting and road improvements. Channel engineering should only be implemented as last resort.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25069	John Day Salmonid Recovery Monitoring Program	183	MCR SH, MRC SCH	Potential indirect benefit through monitoring program	no	yes	Fish abundance monitoring & mark-re-capture surveys corresponding to specific restoration projects. There appears to be overlap of Objective 4 of P&D phase (water quality monitoring) with #25010 -- protocols need to be consistent with Project #25010 in terms of water quality parameters, measurement methodology, & sampling site selection. Data from this project should be compatible with broad scale monitoring projects (e.g., #25010) so that inferences can be drawn about changes observed in the John Day in the context of changes occurring in the larger region.
25070	The Application of Geophysics to Better Define Fall Chinook Salmon Spawning Habitat Use in the Hanford Reach, Columbia River.	183	UCR SFCH, SR FCH	Project intends to use geophysical technology to determine fall chinook habitat use based upon geomorphological and hyporehic factors and extrapolate results to better define SR FCH spawning habitat.	no	yes	Hanford Reach.
25072	Restore Tucannon River Riparian Habitat: Wooten Wildlife Area	400	SR FCH, SR SSCH, SR SH	Improve riparian habitat conditions	no	yes	High cost per unit of riparian habitat improvement
25073	Wheeler SWCD Riparian Buffer Planning and Implementation	400(153)	MCR SH, MCR SCH	This project will implement a riparian buffer program using cost share funding from USDA, State of Oregon and private landowners	no	yes	Project will implement RPA 153 only if permanent or long term easement. Support if permanent easement, or at least > 15 years. Easement should be consistent with Oregon CREP. This project needs to be implemented consistent with limiting factors & problem locations identified in subbasin summaries & and eventually subbasin planning to ensure fisheries benefits to target species.
25074	Deschutes Water Exchange	151	MCR SH, MCR SCH	Develop an active water market in the Deschutes Basin to reallocate water cos effectively from out-of-stream to instream use in order to improve stream flows and water quality.	no	yes	Project addresses BiOp RPA #151 -- This proposal correctly interprets 151 to include the opportunity to develop markets for water rights as a means to converting water to instream flow use.
25075	Momitoring and Evaluation of Buck Hollow Hydrology	183	MCR SH, MCR SCH	Project will monitor and evaluate the hydrologic function of Buck Hollow Creek after the application of conservation management systems designed to reduce peak flows and increase low summer flows.	no	yes	Project offers excellent opportunity for monitoring the effects of full watershed restoration on stream hydrology.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25076	Enhancing Riparian Corridors Sustainably With Integrated Agroforestry	400	MCR SH, MCR SCH	Project could help reduce water temperatures and would improve riparian function. Buffer widths (50 feet) do not provide for pfc)	no	yes	Project leaves many questions unanswered. Cannot predict whether pulp prices will remain high enough to keep upland portion of project viable. Purported benefits to stream temps may be very optimistic relative to current literature. Very high costs relative to fish benefits. Consider more specific proposal at smaller scale.
25077	Umatilla County Conservation Buffer Project	400(153)	MCR SH	Project will implement a riparian buffer program using cost share provided by Confederated Tribes Umatilla Indian Reservation, USDA, State of Oregon, and private landowners	no	yes	Project will implement RPA 153 only if permanent or long term easement. Support if permanent easement, or at least > 15 years. Easement should be consistent with Oregon CREP. This project needs to be implemented consistent with limiting factors & problem locations identified in subbasin summaries & eventually subbasin planning to ensure fisheries benefits to target species.
25078	Acquire Anadromous Fish Habitat in the Selah Gap to Union Gap Flood Plain, Yakima River Basin, Washington	150	MCR SH, MCR SCH	Property acquisitions could lead to floodplain connection, improved habitat diversity and riparian function.	no	yes	Developing a showcase floodplain restoration program in an urban setting is very appealing. Project is time sensitive. Can't tell how much of the budget will actually go to land purchases or how much the eventual reconstruction will cost. This project should be coordinated with the YIN land acquisition program. BOR has its own mitigation responsibilities and \$12 million earmarked for acquisition from the enhancement legislation to help fund that mitigation. It would be beneficial to see how this request for \$ 9,000,000 from BPA fits within the broad context of those previous acquisitions or planned acquisitions.
25079	Integration and Construction of a GIS Based 2-Dimensional Hydraulic/Habitat Model for 51 miles of Hanford Reach and Site of the Columbia River	0	UCR SFCH	N/A (for RPA ESUs)	NA	no	The SHOALs data collection components should be funded somewhere.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25080	Gilliam SWCD Riparian Buffers	400(153)	MCR SH, MCR SCH	Plan and implement riparian buffer program using USDA, Oregon and private landowner costshare	no	yes	Project will implement RPA 153 only if permanent or long term easement. Support if permanent easement, or at least > 15 years. Easement should be consistent with Oregon CREP. This project needs to be implemented consistent with limiting factors & problem locations identified in subbasin summaries & eventually subbasin planning to ensure fisheries benefits to target species.
25081	Improve Upstream Fish Passage in the Birch Creek Watershed	500	MCR SH	Project will improve upstream fish passage in the Birch Creek watershed (Umatilla River tributary) for the benefit of MCR SH by removing structures or building fishways over existing irrigation diversion dams.	no	yes	Birch Creek has a wild stock of summer steelhead estimated at over 30% of the Umatilla subbasin production & is the focus of other habitat restoration work. Suggest follow-up monitoring to verify that the projects are successful -- would be valuable to tie into an overall sub-basin monitoring & evaluation effort that documents the changes in salmonid yield that can be related to this particular project, perhaps via smolt or adult sampling as well as a tagging process.
25082	Walla Walla River Flow Restoration	500	MCR SH, MCR SCH	Project would improve stream flows and eliminate passage barriers in Walla Walla River (a migratory corridor and/or rearing habitat for MCR SH and MCR SCH) through (e.g., permitting/agreements within existing Walla Walla Corps District right of way easements and creating new easements at remaining locations)?	no	yes	Proposal does not identify how much water will be saved (proposes a small range). It will put some water into a problem reach of the Walla Walla River.
25083	Special Status Wildlife Species Surveys and Priority Habitat Assessment in the Deschutes River Subbasin	0	N/A	N/A	N/A	no	
25084	Develop GIS Layers for Generation of Specific Natural Resource GIS Maps and Analysis	154	MCR SH, MCR SCH	Possible indirect benefits -- Project would develop data sets (GIS) for use in comparative analysis of multiple factors affecting fish and wildlife values in the four subbasins.	no	yes	Project would develop data sets for the generation of comparative maps at the watershed level. Proposal does not indicate how the mapping products it describes are distinct from those developed by others, e.g., the NHI - for use in the EDT analysis. Presenting comparative information in maps does not necessarily provide an explanation for changes or provide direction for recovery actions. There are no hypothetical examples of how the product would be used.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25085	Eradication of brook trout from Winom Creek to enhance bull trout habitat.	0	N/A	N/A	N/A	no	
25086	Purchase Perpetual Conservation Easement on Holliday Ranch and Crown Ranch Riparian Corridors and Uplands	150	MCR SH, MCR SCH	Fence 17.7 miles of mainstem John Day River and tributaries, and protect 15,532 acres of uplands two miles east of John Day, Oregon under perpetual conservation easement to improve habitat and protect steelhead spawning grounds and big game winter range.	no	yes	High Priority solicitation. Proposed riparian easement is not described, i.e., how wide, composition. Therefore difficult to determine value to fish. Easement should be consistent with Oregon CREP. Conversion of a USFS grazing allotment to nonuse is now included in the proposal.
25087	Desolation Creek Rehabilitation and Meadow Restoration	400	MCR SH, MCR SCH	Project will recover or reconstruct stream channel and rehabilitate Desolation Meadow on the North Fork of Desolation Creek.	no	yes	While project looks worthwhile, the proposal is not strong in its objectives & associated tasks. Specific methods & citations supporting their use are absent from the proposal.
25088	Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau -- Objectives 6 and 7	0	MCR SH, MCR SCH	N/A	no	no	These tasks primarily include law enforcement and ODFW administrative work. They may well be important, but fall less under the purview of monitoring.
25088	Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau -- Objective 3	184	MCR SH, MCR SCH	Would provide information concerning the impact of hatchery fish on a wild steelhead population in the Deschutes Basin. This information would allow more effective recovery planning and implementation of management actions.	no	yes	This objective is a worthwhile goal. However, the design proposed will have relatively low power, and the number of sample sites will nearly certainly need to be increased to detect significant differences. This type of study, including before/after data collection and control/treatment areas is tremendously important, but this particular study is unlikely to provide robust information. In addition, there is a huge quantity of disparate data/types of work being done, that could be much better coordinated. If the experimental design for objective 3 can be improved, this is a reasonable and worthwhile project.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25088	Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau -- Objectives 1 and 2	180	MCR SH, MCR SCH	Allows more accurate assessment of population status and habitat conditions, as well as collection of baseline data in the Columbia Plateau Province. This in turn, will allow more effective recovery planning, by providing necessary information for targeting actions.	no	yes	These are important objectives. However, they should be should be explicitly coordinated with NMFS and other agencies; currently ODFW has been working with NMFS, BoR and several other agencies to create a comprehensive M and E program for the John Day Basin --this is important work and should be strongly supported.
25088	Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau -- Objective 5	154, 180	MCR SH, MCR SCH	This task includes collection and organization of habitat information across the Columbia Plateau. Such data compilation will allow more effective targeting of management actions and provide information important for TRT and other analyses	no	yes	The administrative aspect of this task -- identifying priority watersheds -- is probably a low priority for NMFS. However, the data collection and organization that accompanies this project has the potential to be extremely useful to the subbasin assessment and TRT processes. This aspect should be supported.
25088	Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau -- Objective 4	0	N/A	N/A	N/A	no	Relevant for resident fish ESA concerns -- should be highlighted by FWS
25089	The Effects of Agriculture on Amphibians of the Columbia Plateau	0	N/A	N/A	N/A	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25091	Mainstem habitats and aquatic communities: assessment and management options	0	MULTIPLE	The proposal is to do the following: 1) conduct assessments of habitat and trophic structure 2) establish baseline datasets against which habitat or community changes can be measured 3) Design and conduct field experiments. Atual field experiments woould not be started until 2004, following assessments, meetings or workshops with managers and other researchers, and a series of modeling studies that should guide experiment selection and design. The study sites for the first year would be in the upper portion of John Day Reservoir. This reach is known to be important for rearing of juvenile fall chinook salmon and water level management could affect fairly large areas of habitat in this area. Other sites would be considered for study sites.	no	no	Somewhat related to 155, but not close enough. The significance of the investigation to the cited RPA's is not discussed. "MULTIPLE" refers potentially to Snake and Upper Col. ESU's. ISRP recommends not to fund stating that the proposal is not a complete proposal but a series of hypotheses to be tested.
25092	RESTORATION OF HEALTHY WATERSHED TO PALOUSE RIVER DRAINAGE IN IDAHO	154	MULTIPLE	Possible indirect benefits -- planning & coordination project and instream assessment	no	yes	Proposal is to hire a person to initiate planning, identify problems, locate potential project sites, & potential cooperators. Project also proposes to begin habitat improvement activities in Deep Creek. Fund instream assessment & planning efforts only, and not fund restoration activities until a plan is in place that includes a statement of expected benefits in terms of fish or mitigation.
25093	Characterize Genetic Differences and Distribution of Freshwater Mussels	0	N/A	N/A	N/A	no	
25094	Restore Touchet River Watershed Habitat to Support ESA listed Stocks	400	MCR SH, MCR SCH	Project would create pool habitat features in Touchet River, a system lacking pool habitat.	no	yes	Project does not respond to watershed process problems - treats symptoms. While treatment methods have created durable habitat features, they have not been shown to improve survival and should not be viewed as susbstitute for restoring sustainable watershed function.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25095	Pesticides and the environmental health of salmonids in the Yakima subbasin.	0	MCR SH, MCR SCH	The proposal would evaluate the impacts of current use pesticides on the environmental health of salmon and the viability of native populations in the Yakima River and its tributaries. The specific aim of this research proposal is to answer the following questions regarding pesticides and salmon in the Yakima subbasin: 1) are pesticide pulses in salmon habitat sufficient to disrupt the normal function of the salmon nervous system 2) if so, do these impacts have measurable and negative consequences for the performance or fitness of exposed animals 3) what limits do pesticides impose on the genetic integrity and productivity of wild salmonid populations?	no	no	This project addresses basic water quality that could be an issue common in heavily agricultural watersheds. The ISRP believes that the proposal should be funded in part. Proposal could have application to similar ventures in other watersheds. But the proposal is not specifically mentioned in any RPA actions.
25096	Determine Quantitative Values for the Perpetual Timber Rights on the WDFW Oak Creek and Wenas Wildlife Areas.	0	MCR SH, MCR SCH	No direct benefits. Project could lead to trade for high quality habitats	no	no	Timber inventory is basic management responsibility of timber land owner. No clear vision as to goal(s) of potential land trade. Would this be primarily driven to benefit fish, big game, or non-game species?
25097	Salmon and Steelhead Habitat Inventory and Assessment Project (SSHIAP)	154	MULTIPLE	Data synthesis to provide routed & segmented hydrology, and collate and synthesize data on 19 aquatic habitat variables & pesticide data over an estimated 59,000 mi of streams in 8 salmonid-bearing subbasins in the WA portion of this Province.	no	yes	SSHIAP is a statewide (WA) salmonid habitat data system. This would update and enhance some data layers that could be useful to subbasin and watershed assessments.
25098	Characterize and Assess Wildlife-Habitat Types and Structural Conditions for Subbasins within the Columbia Plateau Ecoregion	0	N/A	N/A	N/A	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
25099	Oregon CREP Improvement Project	153	MCR SH, MCR SCH	Project will provide outreach and technical assistance for the CREP program in Oregon. The project will also develop a long-term easement option for the CREP Program.	no	yes	Strong Conditional support. Proposal must identify how the goals will be met, provide assurances that the funds and technical staff will be dedicated solely to achieving objectives of action 153. If proposed FTEs not dedicated and annual performance accountable to 153, the benefit to meeting action agency responsibilities in the FCRPS is unclear. The budget needs better description and justification. Great opportunity to be a model for implementation across all subbasins. Proposal would be stronger if focused on implementation of 153 through CREP, identified process, and accountability.
25100	Protect Normative Structure and Function of Critical Aquatic and Terrestrial Habitat	400	MCR SH, MCR SCH	Project would improve riparian conditions and water quality in stream with occasional sthd use.	no	yes	Relationship between proposed buffer widths and anticipated riparian function are not described. Therefore difficult to determine the overall benefit to fish. Costs seem high relative to buffer widths and fish distribution.
25101	Use of Mainstem Habitats by Juvenile Pacific Lamprey (<i>Lampetra tridentata</i>)*	0	N/A	N/A	N/A	no	
195505500	Umatilla Tribal Fish & Wildlife Enforcement	0	N/A	N/A	N/A	no	
198343500	Operate and Maintain Umatilla Hatchery Satellite Facilities	BASE	MCR SH, COHO-U, FALL CHN-U, SPR CHN-U	Increase abundance of existing populations and/or reintroduce replacements for extirpated populations in Umatilla River using hatchery techniques	NO	NO	Acclimation project for steelhead supplementation (MCR SH) and reintroduction/supplementation of coho, fall chinook, and spring chinook (Carson stock). Closely integrated with Umatilla Hatchery. Provides major fishery benefits.
198343600	Umatilla Basin Fish Facilities Operation and Maintenance	BASE	MCR SH	Increase abundance/survival by providing access to habitat and improving passage survival of juvenile and adult salmon and steelhead; provide broodstock collection facilities for steelhead program designed to boost native population; acclimation facilities to improve homing / reduce straying of hatchery production	NO	NO	Passage element of project is necessary for maintaining anadromous fish access to much of the Umatilla River. Acclimation sites necessary to reduce straying into Snake River. Part of an over-all program that provides major fishery benefits.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
198402100	Protect and Enhance Anadromous Fish Habitat in The John Day Subbasin	400	MCR SH, MCR SCH	Project develops and implements riparian fencing and instream structure projects to protect, enhance and restore riparian and instream habitat to improve anadromous salmonid production.	no	yes	Effectiveness needs to be adequately monitored & evaluated by methods compatible with regional monitoring projects (e.g., #25088, #199801600, #25010). Monitoring of physical characteristics must be implemented with compatible methods so that inferences can be drawn about changes observed in the John Day in the context of changes occurring in the larger region. Tier 1 monitoring for presence or absence of salmonid species of concern must occur on project sites.
198506200	Passage Improvement Evaluation	183	MCR SH, MCR SCH	Project helps ensure fish screens are built to operate within criteria	no	yes	
198710001	Enhance Umatilla River Basin Anadromous Fish Habitat	400	MCR SH, MCR SCH, COHO-U, FCH-U	Project would enhance floodplain, riparian and in-stream habitat on private lands in the Umatilla River Basin in order to increase stream productivity in the target species.	no	yes	Habitat restoration is one of the most effective means for increasing smolt- to-adult life stage survival. Proposal needs to better address restoration in a science-based manner -- effective restoration tools need to be identified, applied, & evaluated thru a standardized process beginning with watershed condition assessment & following with priority prescriptions, proven restoration treatments, & well-coordinated monitoring.
198710002	Umatilla Subbasin Fish Habitat Improvement	400	MCR SH	Protect and enhance coldwater fish habitat on private lands in the Umatilla River basin by fencing.	no	yes	See comments above for #198710001. Proposal needs a clear listing and justification of priorities, and the input of an analytical team toward development of a subbasin assessment, prescription, rehabilitation, and monitoring plan with clearly defined response variables, & with ties to a basinwide task of effectiveness monitoring. Habitat restoration projects should be evaluated as a program on the basis of smolt yield as a key response variable, in selected control and treatment watersheds, with replication.
198802200	Umatilla River Fish Passage Operations	Base	MCR SH, MCR SCH, COHO-U, FCH-U	Project will increase survival of migrating juvenile & adult salmon & steelhead in the Umatilla Basin by operating passage facilities, flow enhancement measures, trapping facilities, & transport equipment to provide adequate passage conditions.	no	NO	Proposal is a continuation of a 13-year project to operate fish passage facilities on the Umatilla River. As a result of this project, fish populations have been restored and water returned to the river.
198805302	Design and Construct Umatilla Hatchery Supplement	0	SPR CHN-U	Increase abundance of spring chinook (that replace extirpated population) in the Umatilla by increasing number of hatchery smolts	NO	NO	Seeks to increase production of spring chinook (Carson stock) into the Umatilla River from 720 K to 1.235 M smolts, which may increase interactions with listed steelhead (HGMP may clarify). May provide increased fishery benefits.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
198805306	Hood River Production Program (HRPP): Hatchery O&M - Portland General Electric - Enron	BASE	MCR SCH	Increase abundance of (unlisted) MCR SCH reintroduced into Hood River to become a self-sustaining populations to replace extirpated local population	NO	NO	Supports Hood River reintroduction program for spring chinook. Information developed from this project may be applicable to other re-introduction programs. Future fishery benefit expected.
198811525	Yakima/Klickitat Fisheries Project (YKFP) Design and Construction	0	NONE	N/A	NO	NO	Office complex for YKFP program; improved data storage/security; interpretive center
198812025	Yakima/Klickitat Fisheries Project (YKFP) Management	0	NONE	N/A	NO	NO	Provides on-going funding for YIN management of the YKFP programs.
198902401	Evaluate Juvenile Salmonid Outmigration and Survival in the Lower Umatilla River Basin	185	MCR SH, MCR SCH	Provide greater understanding of canal, transportation, hatchery and river operations on salmonid populations in the Umatilla River by conducting individual-based (PIT-tag) studies of outmigrating juveniles	no	yes	This is ongoing work. PIT-tag studies are important. Much of the hatchery work is required under the hatchery BiOp. Habitat evaluation should be better coordinated with other habitat efforts (e.g. ODFW monitoring/subbasin assessment).
198902700	Power Repay Umatilla Basin Project	BASE	Multiple	Ensures that flow is provided for fish in the lower 30 miles of the Umatilla River that is heavily diverted for agricultural use. In recent past, before the project began, inadequate passage conditions for both adult and juvenile migrants occurred at critical times in both the spring and fall. When conditions necessitate it, the program pays for the power costs to pump Columbia mainstem water to the farms that otherwise would use the diversions in the lower part of the Umatilla River.	no	no	This is for on-going pumping costs under phase 1 and 2 of the Act. The ISRP says that it is a complicated program of water pumping that ensures flow for fish and produces tangible results. Do not confuse the project with phase 3 of the Act, which according to HCD has considerable issue to be resolved. The power costs should not be as high as those reflected in the table. Not a priority subbasin per #149.
198903500	Umatilla Hatchery Operation and Maintenance	BASE	MCR SH, MCR SCH	Increase abundance of indigenous (listed) steelhead and (unlisted) spring chinook using hatchery techniques	NO	NO	Provides important fishery benefit.
199000500	Umatilla Fish Hatchery Monitoring and Evaluation	BASE	MULTIPLE	Assesses the reproductive success of natural spawning hatchery fish.	NO	NO	Potential for also contributing to RPA 182 (assessing reproductive success of hatchery fish). MULTIPLE refers to MCR SH and MCR SCH; SR FC and SSCH
199000501	Umatilla Basin Natural Production Monitoring and Evaluation Project	BASE	MULTIPLE	supports adaptive management approach to improving production in the Umatilla River by tracking natural spawning of salmon and steelhead of hatchery and/or natural origin	NO	NO	Monitoring and evaluation of several on-going programs important to sub-basin objectives. MULTIPLE refers to MCR SH, MCR SCH, coho-u, fall chn-u, others

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199000501	Note: the above project (199000501) sub-divided for the purposes of this spreadsheet to reflect that some components are already required for ESA compliance	BASE		Fall chinook and spring chinook marking component of this project allows for identification and removal of adults that stray into Snake River.	YES	NO	Spring chinook and fall chinook marking component required by hatchery biop.
199009200	Protect and Enhance the Wanaket Wildlife Mitigation Area.	0	N/A	N/A	N/A	no	
199102900	Understanding the effects of summer flow augmentation on the migratory behavior and survival of fall chinook salmon migrating through L. Granite Res.	105; 143, 190	SR FCH	Evaluate benefits of summer flow augmentation in Lower Granite Reservoir.	No	yes	The debate over the value of summer flow augmentation is far from over. The proposal will provide insight on how to best manage the limited water available, and the survival value of it. ISRP approves of the proposal.
199105700	Fabricate and Install Yakima Basin Phase II Fish Screens	500	MCR SH, MCR SCH	Provides safe downstream passage at irrigation diversions	no	yes	
199106100	Swanson Lakes Wildlife Area (SLWA)	0	N/A	N/A	N/A	no	
199107500	Yakima Phase II Screens -- Construction	500	MCR SH, MCR SCH	Old screens in the Yakima Basin may provide poor protection for fry and fingerlings.	no	yes	not a priority subbasin
199200900	Operate and Maintain (O&M) Yakima Basin Phase II Fish Screens	BASE	MCR SH, MCR SCH	Through proper and consistent O&M, these facilities provide protection from mortality or injury to all species and life stages of anadromous and resident salmonids associated with irrigation diversions.	no	no	The O&M is important.
199206200	Yakama Nation - Riparian/Wetlands Restoration	400	MCH SH, MCR SCH, COHO U	Project goal is to protect, restore, and manage 27,000 acres of floodplain along anadromous fish bearing streams in the agricultural portion of the Yakama Nation Reservation (Yakima River, Satus and Toppenish Creeks).	no	yes	Project is to acquire land @ 2-3,000 acres annually with a goal of 27,000 acres. O&M and M&E are included, & the project offers good cost share from a variety of sources. Strong program -- ability to manage large tracts of land enables effective water management (floodwater delivery).
199306600	Oregon Fish Screening Project	149, 500	MULTIPLE	Determine priority listings and reduce fish entrainments in irrigation systems by the fabrication and installation of new replacement fish screening and passage structures in the three basins.	no	yes	ISRP notes that the proposal's method to prioritize projects would place most of them in roughly the same range. It is impossible to determine the number of projects that would occur in the John Day, which is a priority subbasin. What is the relationship with BoR in this priority subbasin?

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199401806	Implement Tucannon River Model Watershed Plan to Restore Salmonid Habitat	400	SR FCH, SR SSCH, SR SH	Although program was initiated based on a premise that fish habitat in the Tucannon River would be improved by "...increasing pool and spawning habitat quality & quantity through geomorphic stabilization, riparian bio-function restoration, increasing complexity, maintaining adequate flow, and reducing water temperature and sediment", the actual focus of the project seems to be development of bio-engineered instream structures; there is no evidence that the project is improving conditions for fish.	no	no	Bioengineering projects should be limited to "fine-tuning" once watershed function has been restored. Bio-engineered projects are methods to control a channel; they generally do not produce the geomorphic stability required for a productive watershed. Sponsors did not provide any information to show biological benefits of projects.
199401807	Garfield County Sediment Reduction and Riparian Improvement Program	400	SR SH, SR FCH	Continuing aid to the farmers and ranchers of Garfield County in their continuing effort to reduce the amount of soil erosion on cropland, rangeland, and riparian areas through conservation practices.	no	yes	Proposal would be stronger if monitoring data was able to show reduced erosion as result of 7 years of implementation.
199402600	Pacific Lamprey Research and Restoration	0	N/A	N/A	N/A	no	
199404200	Trout Creek Habitat Restoration Project	400	MCR SH	Project consists of O&M and construction of instream and riparian habitat improvement; and M&E of Summer steelhead smolt production and habitat recovery.	no	yes	A completed watershed assessment should form the basis of the restoration plan and provide context for projects. Specific information about the choice of sites or evidence for habitat improvement is lacking. The monitoring plan and methods are currently
199404400	Enhance, protect, and maintain shrubsteppe habitat on the Sagebrush Flat Wildlife Area (SFWA)	0	N/A	N/A	N/A	no	
199405400	Bull Trout Abundance Monitoring in the Lower Deschutes River formerly "Bull Trout Genetics, Habitat Needs, L.H. Etc. In Central And N.E. Oregon"	0	N/A	N/A	N/A	no	
199405900	Yakima Basin Environmental Education	0	N/A	N/A	N/A	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199406900	Estimate production potential of fall chinook salmon in the Hanford Reach of the Columbia River.	0	UCR SFCH	Major study of Hanford Reach spawning/rearing vs habitat characteristics. Results potentially applicable to other mainstem areas including the Snake.	NA	no	See PNNL response to ISRP comments. This is a multi-year project, two more study years followed by workups. Proponents have worked with other entities to set up a Hanford Reach review group for coordination
199503300	Operate and Maintain (O&M) Yakima Basin Phase II Fish Screens	BASE	MCR SH, MCR SCH	Operate and maintain BPA owned fish screening and trapping facilities located throughout the Yakima basin/	no	no	The proposal would continue O&M clearly an essential, routine component of the process.
199506001	Protect and Enhance Wildlife Habitat in Squaw Creek Watershed	0	N/A	N/A	N/A	no	
199506325	Yakima/Klickitat Fisheries Project Monitoring And Evaluation	184	MCR SCH	Provides greater understanding of hatchery-wild fish interactions in the Yakima and Klickitat sub-basins, by evaluating the effectiveness and impact of ongoing supplementation programs. Information gained will enable more effective recovery planning in this and other subbasins.	no	yes	Well-designed research project; already underway; providing important information that will be applicable to listed ESUs.
199506425	Policy/Technical Involvement and Planning in the Yakima/Klickitat Fisheries Project	0	N/A	N/A	N/A	no	
199601100	Walla Walla River Juvenile and Adult Passage Improvements	500	MCR SH, MCR SCH	provide safe downstream passage at irrigation diversions in the Wall Walla Basin	no	yes	Proposal is strong. ISRP states that it is important to the subbasin. Not a BiOp priority subbasin.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199603501	Satus Watershed Restoration Project	400	MCR SH, MCR SCH	Improve watershed conditions in Satus Creek, an important steelhead stream, & one in which no flow is diverted.	no	yes	Although steelhead are present, with 155 redds in 2000, project has been funded for several years with little reported in the way of habitat improvement. The project has been working to decrease water temperature in lower 20+ miles of stream, consistent with subbasin summary and NMFS BiOp goals. Chronic reliance on labor intensive cattle control, although details of livestock management is largely absent from this proposal. How many AUMs in past & in future -- what is brief description of the plan (mostly herding) to reduce grazing impacts in addition to retiring 40% of the leases? Will future grazing defeat the effectiveness of stream rehabilitation (riparian plantings & instream habitat placement)? Have vegetation performance standards been adopted. If so, are they being met? Good cost share, though, is included.
199604601	Walla Walla Basin Fish Habitat Enhancement	400	MCR SH, MCR SCH	Project could, if the right sorts of projects are implemented, improve riparian conditions in portions of the basin	no	yes	Project would benefit from a stronger watershed context. It is difficult to determine from the proposal what will actually occur on the ground and therefore what benefit will be accrued. Given the relatively modest financial scope of the request, it might be better to narrow the spatial scope of the project to a few specific projects.
199701325	Yakima/Klickitat Fisheries Project Operations and Maintenance	BASE	MCR SCH, UCR SFCH, COHO-U	improve information and evaluate effectiveness of supplementation using various artificial production techniques	NO	NO	Funds O&M for major supplementation (study) program for YKFP. Some components of project may be broadly applicable beyond the subbasin
199701400	Evaluation of Juvenile Fall Chinook Stranding on the Hanford Reach	0	UCR SFCH	Evaluate effects of hydro operations on stranding of juveniles.	NA	no	Completion of ongoing study,
199703400	Monitoring Fine Sediment Grande Ronde and John Day Rivers	154	MCR SH, MCRSCH, SR SH, SR SSCH	Project will monitor surface fine sediment and overwinter sedimentation in chinook spawning habitats in monitored river reaches, analyze potential trends and relationships in data, and relate to salmon survival.	no	yes	This ongoing project monitors sediment in spawning gravels of the John Day & Grande Ronde Rivers for 5 years to determine trends in substrate conditions, the relation between surface fine sediment & sedimentation of spawning sites, & consistency of substrate conditions with specified objectives in recovery plans & BiOps.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199705100	Yakama Nation Yakima/Klickitat Fisheries Project (YKFP) Yakima Side Channels	150	MCR SH, MCR SCH	Project can acquire key floodplain reaches	no	yes	Project has acquired significant habitats along the Naches and Yakima Rivers. It would be beneficial to integrate this program with other acquisition programs, or at least identify clear delineation/division of roles between programs.
199705300	Toppenish-Simcoe Instream Flow Restoration and Assessment	500	MCR SH, MCR SCH	Project could restore properly functioning instream flow conditions in Toppensih and Simcoe Creeks, two important steelhead streams	no	yes	The Satus and Toppenish systems (including Simcoe) are presently the cornerstones of steelhead recovery in the Yakima. Combined they produce roughly 2/3 of Yakima steelhead. With improved flow conditions, that fraction will grow.
199801600	Monitor Natural Escapement & Productivity of John Day Basin Spring Chinook	183	MCR SCH, MCR SH	Monitoring program	no	yes	Project is to monitor natural escapement & productivity of John Day River Basin spring chinook & summer steelhead -- estimating SAR, egg-to-smolt survival, smolt abundance, & adult & parr distribution for chinook, & spawner escapement for steelhead.
199801700	Eliminate Gravel Push-up Dams in Lower North Fork John Day	149	MCR SH, MCR SCH	Project proposes to eliminate 3 gravel push-up dams in the lower North Fork John Day River & replace them with infiltration gallery pump stations to improve water quality and migratory passage.	no	yes	Previous efforts have replaced 4 gravel dams with infiltration systems.
199801800	John Day Watershed Restoration	400, 149	MCR SH, MCR SCH	Implement protection and restoration actions to improve water quality, water quantity, fish habitat, & eliminate passage barriers.	no	yes	Proposal continues & expands ongoing watershed restoration activities by restoring riparian habitat, eliminating passage barriers, increasing tributary water flow, & coordinating with other entities. Suggest that monitoring protocols be compatible with those of #25088 and #199801600 so that inferences can be drawn about observed changes in the context of changes occurring in the larger region.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199802000	Assess Fish Habitat and Salmonids in the Walla Walla Watershed in Washington	154	MCR SH	Indirect effect -- project is a habitat assessment project.	no	yes	Continued WDFW assessments in the Walla Walla Basin is essential to efforts to continue to restore salmon and steelhead populations. Suggest that the two groups working on the M&E task meet & agree upon a coordinated approach that is a function of the questions to be asked. Also recommend a review of smolt & adult trapping options. Recommend that the watershed conditions assessment continue to completion, with immediate attention to high priority restorations & planning.
199802200	Pine Creek Ranch	149	MCR SH, MCR SCH	Elimination of fish passage barriers	no	yes	
199802800	Trout Creek Watershed Improvement Project	154	MCR SH	Indirect -- indirect since project will complete watershed assessment and develop watershed plan.	no	yes	Proposal is to implement practices that will enhance steelhead smolt production & habitat recovery following completion of a watershed assessment/long range plan currently being conducted.
199803300	Restore Upper Toppenish Watershed	500	MCR SH, MCR SCH	Reduce sediment, improve riparian habitat and potentially improve late summer base flows for steelhead in Toppenish Creek.	no	yes	Project mitigates for BIA land management impacts to Toppenish Creek Watershed
199901000	Mitigate Effects Of Runoff & Erosion On Salmonid Habitat In Pine Hollow and Jackknife	400	MCR SH	Project will implement practices to reduce erosion and flooding, allowing natural recovery of riparian vegetation and channel type in Pine Hollow and Jackknife Canyons.	no	yes	This is a companion proposal for Sherman County Water Conservation proposals #25050 & #25006. The watershed restoration activities were developed cooperatively with landowners through a watershed council; excellent coordination & cost-sharing among agencies & other groups.
199901300	Ahtanum Creek Watershed Assessment	154	MCR SH, MCR SCH	Indirect effect since the project is to design treatments for instream flow and other watershed problems based on understanding of the ecology of anadromous fish in Ahtanum Creek.	no	yes	Solid approach to assessing and eventually treating watershed scale problems. Concerned that assessment phase has taken or will take 6 years to complete. There are no milestones specifying when the assessment is going to be done.

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
199908800	Columbia Plateau Water Right Acquisition Program	149(151)	MCR SH, MCR SCH, WTR STHD-U	Acquire existing water rights on a voluntary basis through purchase, gift and water conservation projects, and transfer to instream water rights under Oregon state law; target acquisitions to maximize fulfillment of habitat objectives for instream flows.	no	yes	Acquisitions will focus on senior water rights. Project sets stage for securing water in a priority subbasin.
200001500	Oxbow Ranch Management and Implementation	149, 150	MCR SH, MCR SCH	Implement protection and restoration actions to improve water quality, water quantity, and fish habitat.	no	yes	Proposal is to restore management funds for Oxbow Ranch after its delayed acquisition and to complete actions identified in the original proposal. Property management and restoration activities are placed in the context of the FWP, BiOp, and Subbasin summary.
200001900	Tucannon River Spring Chinook Captive Broodstock Program	176, 177	SR SSCH	prevent extinction of endemic population of SR SSCH in Tucannon River using "safety net" artificial production techniques	NO	YES	Tucannon River Project specifically identified in RPA 176, implemented consistent with RPA 177.
200002300	Securing Wildlife Mitigation Sites - Oregon, Horn Butte (Philippi Property)	0	N/A	N/A	N/A	no	
200002500	Eagle Lakes Ranch Acquisition And Restoration	0	NONE	N/A	no	no	Terrestrial habitat/pothole wetlands
200002600	RAINWATER WILDLIFE AREA	0	N/A	N/A	N/A	no	

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
200003100	North Fork John Day River Subbasin Anadromous Fish Habitat Enhancement Project	400	MCR SH, MCR SCH	Project is to protect & enhance habitat for natural production of wild spring chinook & summer steelhead in the Upper North fork of the John Day River Basin -- Short-term (3-5 years) project effects include native plant community recovery, increased bank stream stability & increased stream channel shading; long-term (25-100 years) project effects include changes in hydrological features vegetation succession, channel narrowing, cooler stream temperatures, reduced sediment input, increased wood recruitment, greater riparian & in-stream habitat diversity -- resulting increased juvenile & adult freshwater survival and thus greater offspring out-migration.	no	yes	Project will implement re-vegetation & passive recovery processes on private & public lands. Good coordination with other projects and across different ownership interests.
200003300	Walla Walla River Fish Passage Operations	Base	MCR SH, MCR SCH	Increase survival of migrating juvenile & adult MCR SH & MCR SCH in the Walla Walla Basin by operating passage facilities, flow enhancement measures, trapping facilities, and transport equipment to provide adequate passage conditions.	no	no	Project aimed at restoring salmon & rehabilitating steelhead populations in the Walla Walla Basin through fish passage efforts -- work should be continued.
200003800	Design and Construct NEOH Walla Walla Hatchery	0	MCR SCH, MCR SH	increase abundance of spring chinook and steelhead in Walla Walla subbasin using artificial production techniques	NO	NO	NMFS supports spring chinook reintroduction here but does not support steelhead plans at this time (see below)
200003800	Note: the above project (200003800) sub-divided for the purposes of this spreadsheet to reflect that some components are supported by NMFS, others not at present time	0	MCR SCH, MCR SH	increase abundance of spring chinook and steelhead in Walla Walla subbasin using artificial production techniques	NO	NO	Steelhead (MCR SH) in area of proposed hatchery are currently managed for natural production, and hatchery steelhead are prevented from entering natural spawning areas in South Fork Walla Walla. Proposed steelhead hatchery program would change this management. NMFS believes an agreed HGMP justifying the need and methods of the steelhead program should precede implementation of this element of the proposal

COLUMBIA PLATEAU PROVINCIAL REVIEW PROJECTS

NMFS' Assessment With Respect to 2000 FCRPS Biological Opinion

Project Number	Project Title	RPA Action Item(s)	ESU(s) Affected	Statement of Potential Biological Benefit to ESU	Already ESA Required?	Biop?	Comments
200003900	Walla Walla Basin Natural Production Monitoring and Evaluation Project	180	MCR SH, MCR SCH	Supports adaptive management approach to improving status of listed populations in the Walla Walla Basin, by providing baseline data and tracking trends in that status.	No	yes	Proposal would benefit from data showing benefit. This has the potential to be a useful project if conducted well, but would like to see commitment to coordinate with NMFS/other regional monitoring efforts.
200005200	Upstream migration of Pacific lampreys in the John Day River: behavior, timing, and habitat preferences	0	N/A	N/A	N/A	no	
200020116	Securing Wildlife Mitigation Sites - Oregon, Horn Butte Area (BAIC Tract)	0	N/A	N/A	N/A	no	

Enclosure 2. Explanation of Acronyms and Criteria in Enclosure 1.

Reasonable and Prudent Alternative (RPA) Action Item(s)

BASE = an ongoing project that affected the survival of broods returning as adults during the base period and which will continue to influence survival at the same rate in the proposed project. The project therefore comprises part of the environmental baseline presumed in the NMFS 2000 Federal Columbia River Power System biological opinion (2000 FCRPS Opinion).

0 = an action that is not called for (specifically or generically) by provisions of the RPA.

1-199 = RPA action number for a project that is called for (specifically or generically) and thus may implement (in whole or part) one of the RPA action items in the NMFS 2000 FCRPS Opinion. This may include ongoing projects that did not affect the survival of broods returning as adults during the base period.

400 = a riparian implementation project that is consistent with the intentions of the RPA but not part of the Conservation Reserve Enhancement Program (CREP) or other agricultural incentive program (therefore not associated with RPA action 153).

500 = a flow, passage, screening, or water acquisition/lease that is consistent with the intentions of the RPA but is not in one of the 16 priority subbasins (therefore not associated with RPA 149).

ESU(s) Affected

The following is a list of acronyms used in the table. Listed evolutionarily significant units (ESU) are in **BOLD** and the eight listed ESUs included in the 2000 FCRPS Opinion's reasonable and prudent alternative are indicated by (*).

SR SSCH	Snake River Spring/Summer Chinook Salmon(*)
SR FCH	Snake River fall Chinook Salmon(*)
SR SOCK	Snake River Sockeye Salmon(*)
SR SH	Snake River Steelhead(*)
UCR SCH	Upper Columbia River Spring Chinook Salmon(*)
UCR SH	Upper Columbia River Steelhead(*)
UCR SFCH	Upper Columbia River Summer/Fall Chinook
OR SOCK	Okanogan River Sockeye Salmon
LW SOCK	Lake Wenatchee Sockeye Salmon

MCR SH	Middle Columbia River Steelhead(*)
MCR SCH	Middle Columbia River Spring Chinook Salmon
LCR CH	Lower Columbia River Chinook Salmon
LCR SH	Lower Columbia River Steelhead
LCSW COHO	Lower Columbia/Southwest WA Coho Salmon
SWW SH	Southwest Washington Steelhead (<i>below Cowlitz on WA side; below Willamette on OR side</i>)
COL CHUM	Columbia River Chum Salmon(*)
UWR CH	Upper Willamette River Chinook Salmon
UWR SH	Upper Willamette River Steelhead
MULTIPLE	Four or more ESUs affected by project
N/A	Affected species is not a Columbia River basin salmon or steelhead
NONE	Project will have <u>no biological effect</u> on any species

When the affected species is a salmon or steelhead of unknown lineage, or one that NMFS has not assigned to an ESU (perhaps because it is a composite hatchery stock), the following acronyms are used:

SPR CHN-U SMR CHN-U FALL CHN-U COHO-U STHD-U SOCK-U

Statement of Potential Biological Benefit to ESU

Text Describing Benefit = the project as proposed is likely to provide a direct or indirect benefit for the affected ESUs if the project is successfully implemented.

N/A = the project is not likely to provide a biological benefit or the project is likely to benefit some fish or wildlife species, but not the salmon and steelhead stocks described above.

Already ESA Required?

YES = the project is already required by an existing NMFS ESA document, or is likely to be required as a result of an ongoing NMFS ESA consultation. ESA documents include Section 7 biological opinions or proposed actions in informal consultations, and Section 10 take permits and associated HCPs.

NO = project is not already required by an existing NMFS ESA document or likely to be required as a result of an ongoing NMFS ESA consultation, or the proposal would accelerate completion of HGMPs or subbasin assessments and plans or go beyond requirements established in Section 7 or 10 processes/documents. (See "NMFS Guidance: Giving Credit for Offsite Mitigation" for further clarification).

Biop?

YES = all four of these conditions are met:

- There is a number greater than zero in the “RPA Action Items” column
- At least one of the eight ESUs that are the subject of the 2000 FCRPS Opinion’s RPA is included in the “ESU(s) Affected” column.
- There is a beneficial effect described in the “Statement of Potential Biological Benefit to ESU” column.
- There is a “NO” in the “Already ESA Required?” column.

NO = any of the four conditions described above is not true

Comments

Staff notations to help explain some of the determinations in the other columns.