



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

October 6, 2006

In reply refer to: KEW-4

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Tom Karier, Chairman
Northwest Power and Conservation Council
851 S.W. Sixth Ave., Suite 1100
Portland, OR 97204-1348

Dear Dr. Karier

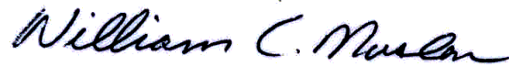
In the enclosure to our August 3, 2006 letter, we provided the Northwest Power and Conservation Council (Council) with our *in lieu* analysis of projects newly proposed in the current solicitation (those with FY2007 project numbers), and committed to providing our assessment of projects with ongoing project numbers. Although our analysis is incomplete and will require further internal review, we are providing the Council with our preliminary *in lieu* ratings for "ongoing" projects during this public comment period. (See attached list.)

As mentioned in our August letter, we considered whether to evaluate on-going project proposals submitted for the 07-09 solicitation. On the one hand, each of these on-going project proposals has already received an *in lieu* rating in prior project solicitations. On the other hand, some of the project proposals have been modified. Also, the nature and extent of another entity's authority or requirements to undertake the activity may have changed. In addition, we have new or additional information about the amount and nature of cost-sharing offered. As a result, Bonneville Power Administration (Bonneville) concluded it would be reasonable to review all of the "on-going" project proposals.

As you can see from the enclosed, our preliminary review indicates that some on-going proposals may present *in lieu* issues. If, in the final analysis accompanying our decision on the Council's recommendations, an on-going project proposal is given an *in lieu* rating of "3" (e.g., not fundable), Bonneville will use the FY07-09 period as a transitional period and will work with affected sponsors to either remedy the problem, or the sponsor will need to finish the work funded by Bonneville. While the FY07-09 period is transitional, we may address *in lieu* problems on a rolling basis, such that sponsors should not assume the *in lieu* resolution can be deferred until FY08 or FY09. We also caution that, while proposals rated a "3" pose the most significant concerns, Bonneville may also address proposals rated as a "2.3" or even a "2.2" with sponsors during this transition period, in order to avoid the problems after FY09. For more information on the *in lieu* rating system, and possible *in lieu* remedies please refer to our previous August letter.

While we are providing these preliminary ratings for your information, additional internal work is needed before we finalize them, including a check on assumptions made about cost-sharing and other factors that may affect the final ratings. Thank you for the opportunity to share Bonneville's draft *in lieu* analysis for "ongoing" projects. I look forward to continuing to work with you on these issues.

Sincerely,



William C. Maslen
Director of Fish and Wildlife

1 enclosure

cc:

Ms. Judi Danielson, Northwest Power & Conservation Council
 Mr. Jim Kempton, Northwest Power & Conservation Council
 Ms. Joan Dukes, Northwest Power & Conservation Council
 Mr. Bruce Measure, Northwest Power & Conservation Council
 Ms. Rhonda Whiting, Northwest Power & Conservation Council
 Mr. Larry Cassidy, Northwest Power & Conservation Council
 Ms. Melinda Eden, Northwest Power & Conservation Council
 Mr. Doug Marker, Northwest Power & Conservation Council
 Mr. Brian Lipscomb, Columbia Basin Fish & Wildlife Authority
 Chairman Dean Adams, Burns Paiute Tribe
 Chairman Chief Allen, Coeur d'Alene Tribe
 Chairman Michael Marchand, Confederated Tribes of the Colville Reservation
 Chairman Glen Nenema, Kalispel Tribe
 Chairperson Jennifer Porter, Kootenai Tribe of Idaho
 Chairperson Rebecca Miles, Nez Perce Tribe
 Chairman James Steele Jr., Confederated Salish & Kootenai Tribes
 Chairperson Alonzo Coby, Shoshone Bannock Tribes of Fort Hall
 Chairman Terry Gibson, Shoshone Paiute Tribes of the Duck Valley Reservation
 Chairman Richard Sherwood, Spokane Tribe of Indians
 Chairman Antone Minthorn, Confederated Tribes of the Umatilla Indian Reservation
 Chairman Ron Suppah, Confederated Tribes of the Warm Springs Reservation
 Chairman Lavina Washines, Yakama Indian Nation
 Ms. Mary Verner, Upper Columbia United Tribes
 Mr. Olney Patt, Jr., Columbia River Intertribal Fish Commission

bcc:

K. Hunt – DKR-7

B. Cobell – DKT-7

B. Maslen – KEW-4

B. Austin – KEW-4

G. Dondlinger – KEWB-4

P. Lofy – KEWL-4

P. Krueger – KEWR-4

A. L'Heureux – KEWR-4

K. Powers – KEWR-4

M. Shaw – KEWU-4

L. Grimm – LC-7

P. Key – LC-7

Official File – KEW (EX-15-18)

10/6/06 Draft In-Lieu Review of Projects Proposed with Ongoing Project Numbers

Proposal Number	Title	Province	Prelim In lieu Rating	Notes	Approx BPA share of total costs?	Status of Cost Share
198331900	New Marking & Monitoring Tech	Mainstem/ Systemwide	1.0	The goal of this project is to develop and evaluate fish-tracking technologies needed to assess the effectiveness of management actions and strategies for recovery of ESA-listed fish populations. Can be used by multiple agencies with parallel responsibilities, however , as applied to primarily FCRPS projects/inquiries, is okay.	BPA 100%	
198335000	Nez Perce Tribal Hatchery Operations & Maintenance	Mountain Snake	1.0	O&M for BPA-funded hatchery mitigating for FCRPS.	BPA 100%	
198335003	Nez Perce Tribal Hatchery M&E	Mountain Snake	1.0	Hatchery RM&E; although fishery managers authorized/required, assume okay since it is an FCRPS hatchery	BPA 96%	Mixed
198343500	Umatilla Hatchery Satellite Facilities O&M	Columbia Plateau	1.0	O&M for Umatilla hatchery facilities; a "1" rating on assumption these are mitigating for the FCRPS (and credited as such) as opposed to mitigating for irrigation in the Umatilla Basin.	BPA 100%	
198503800	Colville Hatchery	Intermountain	1.0	Resident fish substitution in mitigation for FCRPS.	BPA 100%	
198712700	Smolt Monitoring By Non-Feder	Mainstem/ Systemwide	1.0	Daily passage data through the mainstem, Snake, Columbia and mid-Columbia Rivers to facilitate fish passage management decisions, including Biological Opinion implementation. Most facilities involved are FCRPS	BPA 100%	
198802200	Umatilla Fish Passage Operations	Columbia Plateau	1.0	Increase survival of migrating juvenile and adult salmon and steelhead in the Umatilla Basin by operating passage facilities, flow enhancement measures, trapping facilities, and transport equipment to provide adequate passage conditions. A "1" rating on assumption these are mitigating for the FCRPS (and credited as such) as opposed to mitigating for irrigation in the Umatilla Basin.	BPA 100%	
198805301	Grande Ronde/Imnaha Endemic Spring Chinook Supplementation – Northeast Oregon Hatchery	Blue Mountain	1.0	NEOH project construction, operation	BPA 100%	
198805303	Hood River Production M&E - Ws	Columbia Gorge	1.0	Offsite supplementation program to support summer and winter steelhead populations and reestablish spring chinook salmon. Assuming in mitigation for the FCRPS and not impacts of Powerdale (being removed).	BPA 92%	Mixed

198805307	Hood R Prod O&M - Ws/Odfw	Columbia Gorge	1.0	Restore and maintain populations of summer and winter steelhead, and re-establish and maintain the spring chinook population in the Hood River subbasin. Steelhead and chinook broodstock will be held and spawned at the Parkdale Fish Facility. Assume in mitigation for the FCRPS and not impacts of Powerdale (being removed).	BPA 100%	
198811535	Klickitat Fishery YKFP Design	Columbia Gorge	1.0	Assume in mitigation for FCRPS (other hydropower projects also authorized/required, but will assume this mitigation focused on and creditable to FCRPS only).	BPA 100%	
198902700	Power Repay Umatilla Basin Project	Columbia Plateau	1.0	Umatilla Act requires BPA to fund power costs	BPA 100%	
198903500	Umatilla Hatchery Operation and Maintenance and Fish Liberations	Columbia Plateau	1.0	Assume in mitigation for FCRPS (note some cost share from Idaho Power)	BPA 86%	Confirmed
199001800	Lake Roosevelt Rainbow Tr Hab/Pass Impr Prog	Intermountain	1.0	Resident fish substitution in mitigation for FCRPS.	BPA 100%	
199004401	Lake Creek Land Acquisition	Intermountain	1.0	Wildlife habitat mitigation for Albeni Falls credited with HUs	BPA 100%	
199007700	Dev Of Systemwide Predator Control for Northern Pikeminnows.	Mainstem/Systemwide	1.0	Pikeminnow predator control; direct mitigation for FCRPS.	BPA 100%	
199009200	Wanaket Wildlife Area	Columbia Plateau	1.0	O&M for wildlife mitigation lands, enhancement HU credits; assume requested funds consistent with terms of MOA	BPA 100%	
199101904	Hungry Horse Mitigation - Stocking of Offsite Waters - Creston NFH	Mountain Columbia	1.0	Mitigation (recreational fishery stocking) for impacts of Hungry Horse	BPA 100%	
199102800	Pit Tagging Wild Chinook	Mountain Snake	1.0	PIT tagging, data support management decisions for FCRPS operations.	BPA 100%	
199104600	Spokane Tribal (Galbr Sprgs) H	Intermountain	1.0	O&M for Spokane Tribal hatchery (resident) in mitigation for FCRPS	BPA 100%	
199104700	Sherman Creek Hatchery - O&M	Intermountain	1.0	O&M for BPA-funded hatchery, assume in mitigation for FCRPS.	BPA 100%	
199106000	Pend Oreille Wetlands Wildlife Mitigation Project - Kalispel	Intermountain	1.0	O&M for BPA-funded mitigation property; assume requested funds consistent with terms of MOA..	BPA 88%	Confirmed
199106100	Swanson Lake Wildlife Mitigation Project (Swanson Lakes Wildlife Area)	Columbia Plateau	1.0	O&M and enhancement on wildlife habitat mitigating for Grand Coulee, assume requested funds consistent with terms of MOA	BPA 100%	
199106200	Spokane Tribe Wildlife Mitigation	Intermountain	1.0	Habitat acquisition for mitigation of wildlife	BPA 100%	
199107800	Burlington Bottoms Wildlife Mitigation Project	Lower Columbia	1.0	O&M, restoration activities on BPA-funded mitigation property; assume requested funds consistent with terms of MOA.	BPA 100%	
199204800	Colville Confederated Tribes Wildlife Mitigation Project	Intermountain	1.0	O&M and enhancement on wildlife habitat mitigating for FCRPS; assume requested funds consistent with terms of MOA	BPA 100%	

199205900	Amazon Basin/Eugene Wetlands -	Lower Columbia	1.0	O&M/restoration activities on BPA-funded wildlife mitigation lands; assume requested funds consistent with MOA or other agreements.	BPA 80%	Mixed
199206100	Albeni Falls Wildlife Mitigation	Intermountain	1.0	Land acquisition & O&M on wildlife habitat mitigating for Albeni Falls; assume requested O&M funds consistent with terms of MOA	BPA 99%	Confirmed
199302900	Survival Estimates for the Passage of Juvenile Salmonids Through Snake and Columbia River Dams and Reservoirs	Mainstem/Systemwide	1.0	R&ME relating to mainstem passage.	BPA 70%	Confirmed
199303501	Red River Restoration O & M	Mountain Snake	1.0	Restoration and O&M on BPA-funded mitigation parcel; assume requested funds consistent with MOA terms.	BPA 75%	Mixed
199304000	Fifteenmile Creek Habitat Restoration and Monitoring Project	Columbia Gorge	1.0	O&M for fencing, RM&E for other measures in conjunction with multiple entities; RM&E is linked to measuring success of funded activities; assume that requested funds consistent with terms of MOA	BPA 72%	
199404400	Enhance, protect and maintain shrub-steppe habitat on the Sagebrush Flat Wildlife Area (SFWA)	Columbia Cascade	1.0	O&M, and some enhancement on wildlife mitigation habitat lands; assume requested funds consistent with terms of MOA	BPA 100%	
199404900	Kootenai River Ecosystem Improvements Project	Mountain Columbia	1.0	O&M on BPA-funded wildlife mitigation lands; assume requested funds consistent with terms of MOA	BPA 100%	
199500900	Lake Roosevelt Rainbow Trout N	Intermountain	1.0	Resident fish substitution in mitigation for FCRPS (rainbow trout net pen).	BPA 62%	Mixed
199501100	Chief Joseph Kokanee Enhancement	Intermountain	1.0	Fish passage projects, and channel spawning feasibility studies for kokanee.	BPA 100%	
199501300	Resident Fish Substitution Program	Mountain Snake	1.0	Resident fish substitution, Dworshak	BPA 96%	Under Dev.
199502700	Lake Roosevelt White Sturgeon Recovery Project	Intermountain	1.0	White sturgeon M&E and aquaculture in Lake Roosevelt; assume in mitigation for FCRPS. [compare 198605000?]	BPA 88%	Confirmed
199505701	S Idaho Wildlife Mitigation	Middle Snake	1.0	O&M on wildlife mitigation habitat purchased with BPA funding; assume requested funds consistent with terms of MOA.	BPA 100% (Cost share was listed as "BPA")	
199505702	Southern Idaho Wildlife Mitigation	Upper Snake	1.0	New wildlife mitigation habitat acquisitions, and continued O&M on prior BPA-funded acquisitions; assume requested funds consistent with terms of MOA	BPA 100%	
199505703	Southern Idaho Wildlife Mitigation	Middle Snake	1.0	Wildlife habitat mitigation for Anderson Ranch, Black Canyon, and Deadwood credited with HUs	BPA 100%	

199506001	Iskuulpa Watershed Project	Columbia Plateau	1.0	O&M, acquisition of BIA grazing leases, for fish & wildlife habitat mitigation; assume requested funds consistent with terms of MOA.	BPA 100%	
199601900	Technical Management Team (TMT)	Mainstem/ Systemwide	1.0	DART database management with additional analytical functions addressing FCRPS operational questions	BPA 100%	
199602000	Pit Tagging Spring/Summer Chin	Mainstem/ Systemwide	1.0	Comparative survival study work.	BPA 92%	Under Rev.
199607703	Protect and Restore Waw'aalamnime to 'Imnamatnoon Creek Analysis Area	Mountain Snake	1.0	Road decommissioning, culvert removal, erosion control; assume it occurs on National Forest lands and is covered by BPA-FS MOU.	BPA 84% (70%)	Under Rev.
199607705	Restore McComas Meadows/ Meadow Creek Watershed	Mountain Snake	1.0	Road decommissioning and culvert removal; assume it occurs on National Forest lands and is covered by BPA-FS MOU.	BPA 77% (70%)	Mixed
199608000	Ne Oregon Wldf Proj (Npt) Precious Lands	Blue Mountain	1.0	O&M and restoration activities on BPA-funded wildlife mitigation lands; assume requested funds consistent with terms of MOA.	BPA 87%	Under Dev.
199701501	Imnaha River Smolt to Adult Return Rate and Smolt Monitoring Project	Blue Mountain	1.0	Estimate total juvenile emigrant abundance, smolt survival and smolt-to-adult return rates (SAR) of wild/natural chinook salmon and steelhead at Lower Granite and McNary Dams and support the Smolt Monitoring Program and NEOH M&E Projects	BPA 61%	Confirmed
199800300	Spokane Tribe Wildlife Mitigation Operations & Maintenance	Intermountain	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 100%	
199800702	Gd Ronde Supp Lostine O&M/M&E	Blue Mountain	1.0	Lostine River adult acclimation facility	BPA 98%	Confirmed
199800703	Grande Ronde Supplementation Operations and Maintenance	Blue Mountain	1.0	Assume in mitigation for FCRPS.	BPA 100%	
199800704	Grande Ronde Basin Endemic Spring Chinook Supplementation Project: Northeast Oregon hatcheries implementation-ODFW	Blue Mountain	1.0	NEOH work, including coordination. Assume in mitigation for FCRPS.	BPA 10%	Confirmed
199801001	Grande Ronde Captive Brood O&M	Blue Mountain	1.0	LSRCP hatchery operation & research; research has application beyond LSRCP.	BPA 100%	
199801004	Monitor and Evaluate Performance of Juvenile Snake River Fall Chinook Salmon from Fall Chinook Acclimation Facilities	Blue Mountain	1.0	FCAP (Lyons Ferry Hatchery), assume in mitigation for FCRPS.	BPA 100%	
199801005	Pittsburg Landing Fall Chinook Acclimation Project (FCAP)	Blue Mountain	1.0	Supplement natural production of Snake River fall Chinook above Lower Granite Dam through acclimation and final rearing of Lyons Ferry Hatchery yearling and sub-yearlings	BPA 100%	

199801006	Captive Broodstock Artificial Propagation	Blue Mountain	1.0	Implements the captive broodstock project through the collection of juvenile salmon from the wild and maintaining them in captivity; assume mitigates for FCRPS.	BPA 96%	Under Rev.
199802200	Pine Creek Conservation Area: Wildlife Habitat and Watershed Management on 33,557-acres to benefit grassland, shrub-steppe, riparian, and aquatic species.	Columbia Plateau	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 70%	Mixed
199900301	Evaluate Spawning of Fall Chinook and Chum Salmon Just Below the Four Lowermost Mainstem Dams	Mainstem/ Systemwide	1.0	Spawning studies below FCRPS dams.	BPA 100%	
200000900	Logan Valley Wildlife Mitigation Site	Middle Snake	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 78%	Mixed
200001500	Oxbow Conservation Area Management	Columbia Plateau	1.0	O&M, M&E and restoration activities on BPA-funded wildlife mitigation; assume requested funds consistent with terms of MOA (note sponsor indicates that "as per memorandum of agreement with BPA, project funding is to continue for the life of the hydropower system.")	BPA 79%	Mixed
200001600	Tualatin River NWR Additions	Lower Columbia	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 88%	Mixed
200001900	Tucannon River Spring Chinook Captive Broodstock Program	Columbia Plateau	1.0	Captive broodstock in mitigation for FCRPS.	BPA 42%	Confirmed
200002100	Securing Wildlife Mitigation Sites - Oregon Ladd Marsh WMA and Grande Ronde Subbasin Wetlands	Blue Mountain	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 26%	Confirmed
200002600	Rainwater Wildlife Area Operations and Maintenance	Columbia Plateau	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 91%	Mixed
200002700	Acquisition Of Malheur River Wildlife Mitigation Project	Middle Snake	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 75%	Mixed
200003500	Rehabilitate Newsome Creek - S	Mountain Snake	1.0	Multiple fish habitat restoration activities within Nez Perce National Forest; assume BPA-FS MOU applies.	BPA 78% (70%)	Mixed
200003600	Protect And Restore Mill Creek	Mountain Snake	1.0	Multiple watershed restoration activities, appears to be entirely within/on National Forest lands; assume BPA-FS MOU applies.	BPA 77% (70%)	Mixed
200100300	Adult Pit Detector Installatio	Mainstem/ Systemwide	1.0	PIT tag interrogation systems for FCRPS dams.	BPA 100%	

200103100	Intermountain Province Resident Fish Conference and E-Library	Intermountain	1.0	Host conference and e-library for planning and assessment of resident fish and related programs in the Intermountain Province. Assume no other entity authorized/required to conduct such activity. (See similar rating for, e.g., 200711700)	BPA 100%	
200104101	Forrest Conservation Area Management	Columbia Plateau	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 84%	Mixed
200105300	Reintroduction of Chum Salmon into Duncan Creek	Lower Columbia	1.0	Reintroduction in mitigation for FCRPS mainstem impacts	BPA 47%	Confirmed
200200300	Secure & Restore Resident Fish Habitat	Mountain Columbia	1.0	Habitat acquisition and restoration for resident fish in mitigation for Hungry Horse, credited to BPA.	BPA 90%	Mixed
200201100	Kootenai Floodplain Operational Loss Assessment	Mountain Columbia	1.0	Developing "operational" loss assessment for Libby Dam.	BPA 90%	Mixed
200201301	Water Entity (Rpa 151) Nwppc	Mainstem/ Systemwide	1.0	Purchasing of instream flow rights in mitigation for FCRPS (BiOp credit)	BPA 72%	Mixed
200201400	Sunnyside Wildlife Mitigation	Columbia Plateau	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 68%	Mixed
200204500	Coeur D'Alene Fish Habitat Acq	Intermountain	1.0	Fish habitat mitigation lands acquisition (fee, easements, leases); assume in mitigation for FCRPS; no other entity authorized/required to purchase	BPA 100%	
200301200	Shillapoo Wildlife Area	Lower Columbia	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 32%	Confirmed
200303800	Evaluate Restoration Potential of Snake River Fall Chinook Salmon Spawning Habitat	Mainstem/ Systemwide	1.0	Evaluation of mainstem spawning potential downstream of 4 FCRPS lower snake dams.	BPA 100%	
200304100	Evaluate Delayed (Extra) Mortality Associated with Passage of Yearling Chinook Salmon through Snake River Dams	Mainstem/ Systemwide	1.0	RM&E of delayed mortality through of FCRPS lower snake dams.	BPA 100%	
200600300	Desert Wildlife Area O&M (Wetland Enhancement)	Columbia Plateau	1.0	Wetland enhancement on BPA-funded mitigation lands; assume costs consistent with MOA requirements.	BPA 75%	Confirmed
200600400	Wenas Wildlife Area O&M	Columbia Plateau	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 100%	
200600500	Asotin Creek Wildlife Area O&M (Schlee Acquisitions)	Blue Mountain	1.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA.	BPA 83%	Mixed
200600600	Habitat Evaluation Procedures (HEP)	Multiprovince	1.0	HEP evaluation team for determining HEP values (and BPA credits) for BPA wildlife acquisitions.	BPA 100%	

200600800	Evaluation of the Biological Effects of the Northwest Power and Conservation Council's Mainstem Amend. on the Fisheries Upstream & Downstream of Hungry Horse & Libby Dams, MT (Renumbered fr 200715200)	Mountain Columbia	1.0	M&E, modeling to identify the effects of Libby/Hungry Horse operations per mainstem amendment by Council.	BPA 88% [BPA share is probably higher as proposal not clear as to what proportion of cost share was MFWP and not just BPA.]	Confirmed
198805305	Northeast Oregon (NEOH) Outplanting Facilities Master Plan	Blue Mountain	2.1	Technical coordination re: NEOH, including review for participation in US v Oregon processes; fishery managers authorized/required to do this (as to US v. Oregon); need confirmation that cost share appropriate given this requirement	BPA 20%	Confirmed
198906201	Annual Work Plan CBFWA	Mainstem/ Systemwide	2.1	Coordination/travel costs for fish and wildlife managers (managers authorized/required)	BPA 75%	Confirmed
199102900	Research, monitoring, and evaluation of emerging issues and measures to recover the Snake River fall Chinook salmon ESU	Mainstem/Systemwide	2.1	Multiple RM&E activities involving SR chinook, including supplementation-related research; other entities authorized/required to perform some (eg fishery managers, Idaho Power for Hells Canyon-related information); however cost share appears appropriate.	BPA 27%	Mixed
199306000	Select Area Fisheries Enhancement Project	Columbia Estuary	2.1	Select/net pen terminal fisheries to mitigate for FCRPS impacts, provide harvest opportunities for commercial/recreational. Other non FCRPS hydropower producers potentially authorized/required; need confirmation that cost share is reasonable	BPA 55%	Mixed
199401807	Improve Habitat For Fall Chinook, Steelhead in the Lower Snake and Tucannon Subbasins	Columbia Plateau	2.1	Multiple habitat restoration activities (fencing, planting, water source development); multiple other entities authorized/required; assume BPA funding not being utilized for specific practices that other entity required to perform.	BPA 37%	Mixed
199607000	Mckenzie Focus Watershed	Lower Columbia	2.1	Multiple watershed restoration activities, including water quality monitoring; multiple other entities may be authorized/required. Recommend confirmation that no project will occur on lands/waters where the activity is already required.	BPA 30%	Mixed

199608600	Clearwater Focus Program, Idaho SCC	Mountain Snake	2.1	Coordinator position for Idaho State; state authorized/required; recommend confirmation that cost share sufficient. [Rated similar to wildlife manager coordination requests]	BPA 95%	Confirmed
199608701	Montana Focus Watershed Coordi	Mountain Columbia	2.1	Flathead watershed coordinator; other entities authorized/required; recommend confirmation that cost share is sufficient.	BPA 41%	Mixed
199702400	Avian Predation on Juvenile Salmonids in the Lower Columbia River	Mainstem/Systemwide	2.1	RM&E regarding avian predation; fishery managers, Corps authorized/required; cost share appears sufficient.	BPA 17%	Mixed
199706000	Focus Watershed Coordinator - Nez Perce Tribe	Multiprovince	2.1	Watershed coordinator position; other entities authorized/required; need confirmation that no cost share is okay [see other coordination funding requests, similar ratings]	BPA 100%	
199800401	Columbia Basin Bulletin	Mainstem/ Systemwide	2.1	Reporting on issues of stakeholder concern in the Basin. Assume similar to coordination requests from sponsors; this is coordination request from public/stakeholders.	BPA 96%	
199802100	Hood River Fish Habitat	Columbia Gorge	2.1	Multiple protection and restoration activities, including activities that other entities may be authorized/required to perform; recommend confirmation of screening to ensure BPA not funding activities where another entity already required to perform.	BPA 33%	Mixed
199802800	Trout Creek Watershed Restoration Project	Columbia Plateau	2.1	Multiple restoration activates on private lands; recommend confirming that activities occurring on private land where landowner not already required to perform.	BPA 34%	Mixed
199803100	Implement Wy-Kan-Ush-Mi Wa-Kis	Mainstem/Systemwide	2.1	CRITFC coordination costs; tribal entities authorized/required; recommend confirmation that cost share is adequate [rated as all other coordination requests]	BPA 59%	Under Rev.
200102100	15 Mile Creek Riparian Buffers	Columbia Gorge	2.1	Coordination, conservation plan development to assist landowners in providing riparian buffer zones (via NRCS funding) NRCS authorized/required, but cost share appears reasonable.	BPA 8%	Mixed
200102900	Ford Hatchery Operations & Maintenance	Intermountain	2.1	O&M for kokanee production in mitigation for FCRPS; other entities authorized/required (fishery managers) but cost share is addressed	BPA 30%	Confirmed
200103300	Hangman Restoration Project	Intermountain	2.1	Restoration activities and conservation easement acquisitions for resident fish and wildlife in watershed in mitigation for FCRPS; not a "1" because focus is resident fish and no crediting mechanism for acquisitions	BPA 98%	Under Dev.

200200200	Restore Natural Recruitment of Kootenai River White Sturgeon	Mountain Columbia	2.1	Multiple activities to address low recruitment levels of K white river sturgeon; other entities authorized/required, but cost share appears reasonable if confirmed.	BPA 56%	Mixed
200201900	Wasco Riparian Buffers	Columbia Plateau	2.1	Coordination, conservation plan development to assist landowners in providing riparian buffer zones (via NRCS funding)' NRCS authorized/required, but cost share appears reasonable.	BPA 7%	Mixed
200202600	Morrow County Riparian Buffers Umatilla County Riparian Buffers	Columbia Plateau	2.1	Coordination, outreach, technical support for enrolling riparian buffers via NRCS and related programs; other entities authorized/required (eg NRCS) but cost share appears more than reasonable	BPA 21%	
200203400	Wheeler Co Riparian Buffers	Columbia Plateau	2.1	Coordination, conservation plan development to assist landowners in providing riparian buffer zones (via FSA/NRCS funding)' NRCS authorized/required, but cost share appears reasonable.	BPA 7%	Mixed
200203500	Gilliam Co Riparian Buffers	Columbia Plateau	2.1	Coordination, conservation plan development to assist landowners in providing riparian buffer zones (via FSA/NRCS funding)' NRCS authorized/required, but cost share appears reasonable.	BPA 16%	Confirmed
200205000	Continued Riparian Buffer Projects on Couse/Tenmile and other Salmonid Bearing Streams in Asotin County.	Blue Mountain	2.1	Restoration activities occurring on private land; confirm that screening or other criteria employed so that BPA funding not used for activities landowners already required to conduct, otherwise cost share appears fine.	BPA 45%	Confirmed
200206100	Restore Potlatch R Watershed	Mountain Snake	2.1	Multiple watershed restoration activities; multiple other entities possibly authorized/required to perform, but cost share appears reasonable.	BPA 7%	Mixed
200311400	Acoustic Tracking For Survival	Mainstem/ Systemwide	2.1	Large-scale acoustic array, tracking ocean-going; fishery managers and others authorized required; confirm that cost-share is sufficient.	BPA 39%	Mixed
200400200	Pnamp Funding	Mainstem/ Systemwide	2.1	Funding part of coordinator for PNAMP; other entities authorized to participate. Cost share appears reasonable if confirmed.	BPA 27%	Mixed
198201301	Coded-Wire Tag Recovery	Mainstem/ Systemwide	2.2	Coded wire tag program for regional stock identification; fishery managers/others authorized required; recommend confirm cost share sufficient	BPA 49%	Confirmed
198812035	YKFP Klickitat Management, Data, and Habitat	Columbia Gorge	2.2	RM&E and O&M for YKFP; Mitchell Act funding is cost share; recommend confirmation that cost-share appropriate	BPA 46%	Confirmed
199000501	Umatilla Basin Natural Production Monitoring and Evaluation Project	Columbia Plateau	2.2	M&E for Umatilla Basin fisheries; so fishery managers authorized/required (BPA projects as cost share excluded from percentage summary)	BPA 60%	Mixed

199101901	Hungry Horse Mitigation/Flathead Lake	Mountain Columbia	2.2	Multiple activities for habitat restoration as well as RM&E on variety of lands (private, tribal etc); assume no projects occurring where another entity is already required to perform	BPA 51%	
199202601	Grand Ronde Model Watershed Program Habitat Restoration - Planning, Coordination and Implementation	Blue Mountain	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct; need confirmation that funding not applied for entities already required to conduct the work	BPA 57%	Mixed
199206800	Willamette Basin Mitigation	Lower Columbia	2.2	Land acquisition, O&M, enhancement & RM&E regarding wildlife habitat mitigation for FCRPS; some aspects of RM&E may be authorized/required by others (eg Willamette Floodplain study); recommend confirmation that cost share sufficient	BPA 82%	Mixed
199401805	Continued Implementation of Prioritized Asotin Creek Watershed Habitat Projects	Blue Mountain	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct; need confirmation that funding not applied for entities already required to conduct the work	BPA 45%	Confirmed
199404200	Trout Creek Fish Habitat Restoration Project	Columbia Plateau	2.2	Multiple activities for habitat restoration as well as RM&E on variety of lands (private, tribal etc); assume no projects occurring where another entity is already required to perform	BPA 51%	Mixed
199405900	Yakima Basin Environmental Education Program	Columbia Plateau	2.2	Watershed education/outreach program; other entities authorized/required, but cost share appears reasonable.	BPA 48%	Confirmed
199607702	Protect and Restore Lolo Creek Watershed	Mountain Snake	2.2	Road decommissioning and culvert removal; appears to occur on FS lands as well as private lands; confirm that activities on FS lands covered by BPA-FS MOU; confirm that screening/other criteria ensure that BPA not funding activities other entities required to perform; confirm that cost share is reasonable.	BPA 62%	Mixed
199608300	CTUIR Grande Ronde Subbasin Restoration Project	Blue Mountain	2.2	Multiple watershed restoration activities; multiple other entities authorized/required to perform; need confirmation that screening or other criteria ensures that BPA not funding activities others are required to perform; need confirmation that cost share is sufficient.	BPA 52%	Mixed
199705100	Yakima Basin Side Channels	Columbia Plateau	2.2	Acquisition of floodplain habitat; assume in mitigation for FCRPS; assume development of MOA to address mutual roles responsibilities.	BPA 68%	Mixed
199705600	Klickitat Watershed Enhancement	Columbia Gorge	2.2	Multiple restoration activities; other entities may be authorized/required to conduct; assume screening to ensure BPA funding not going to lands/waters where other entities already required to conduct the activity.	BPA 48%	Mixed

200000100	Anadromous Fish Habitat & Pass	Columbia Cascade	2.2	Multiple restoration activities (culvert removal, livestock management infrastructure) on lands within the Colville reservation; assume none of the projects are already required to be performed.	BPA 70%	Under Dev.
200201500	Provide Coordination and Technical Assistance to Watershed Councils and Individuals in Sherman County, Oregon	Columbia Plateau	2.2	Coordination and outreach to private landowners, develop conservation plans for landowners seeking to enroll in USDA programs like CREP; USDA authorized/required; need confirmation that cost share is reasonable (compare with 200102100, for example).	BPA 55%	Mixed
200201800	Tapteal Greenway Riparian Corridor Enhancement, Protection and Education Outreach--Phase II (Tapteal Bend and Horn Rapids).	Columbia Plateau	2.2	Property acquisition, restoration activities, and education/outreach; multiple entities could be authorized/required (eg WDFW, City of Richland); need confirmation of screening or other criteria to confirm that funding not applied to activities that others already required to perform; confirm that cost share is reasonable.	BPA 67%	Mixed
200202501	Yakima Tributary Access & Habitat Program	Columbia Plateau	2.2	Multiple tributary fish passage related activities; other entities may be authorized required; recommend confirming that screening criteria or other mechanism in place to ensure specific projects are not funded by BPA when another entity already required to perform	BPA 55%	Under Dev.
200203200	Snake River fall Chinook salmon life history investigations	Mainstem/Systemwide	2.2	RM&E on the consequences of ocean- and reservoir-type life histories on passage timing, travel rate, survival, and SAR calculations for Snake River fall chinook salmon; fishery managers/other hydro operators authorized/required, but cost share appears reasonable if confirmed.	BPA 71%	Confirmed
200203600	Restore Walla Walla River Flow	Columbia Plateau	2.2	Water conservation efforts (piping of irrigation, groundwater recharge); need confirmation of screening or other criteria to confirm that BPA not funding such efforts if another entity (irrigation district, other) already required to do so; cost share appears reasonable if so.	BPA 51%	Mixed
200207000	Lapwai Cr Anadromous Habitat	Mountain Snake	2.2	Inventory, planning, and multiple restoration activities (weed control, LWD, erosion control measures, CAFO measures et); other entities authorized/required to perform some: need confirmation or criteria or other screening that BPA not funding activities already required of another entity; also need confirmation that cost share is adequate.	BPA 66%	Mixed
200300100	Manastash Crk Passage & Screening	Columbia Plateau	2.2	Irrigation division screening; assuming that irrigation owners/diverters not already required to screen, cost share appears reasonable.	BPA 45%	Confirmed

200300700	Lower Columbia River and Estuary Ecosystem Monitoring	Columbia Estuary	2.2	Development of an ecosystem based monitoring program for estuarine habitats; fishery managers, others, authorized/required; need confirmation that cost share is sufficient.	BPA 61%	Confirmed
200300900	Canada-Usa Shelf Salmon Survival Study	Mainstem/ Systemwide	2.2	RM&E regarding ocean/climate effects on CR salmon; multiple other entities authorized/required to fund (eg fishery managers, others affecting CR salmon); confirm that cost-share is adequate.	BPA 47%	Mixed
200301100	Columbia R/Estuary Habitat	Columbia Estuary	2.2	Multiple restoration activities, other entities may be authorized required; need to confirm that screening or other criteria to ensures BPA funding not being used for specific activities another entity is required to perform, but otherwise cost share appears reasonable	BPA 38%	Mixed
200500100	Ecology of Yearling and Subyearling Salmonids in Shallow Tidal Freshwater Habitats in the Vicinity of the Sandy River Delta in the Lower Columbia River	Lower Columbia	2.2	Pilot study of ecology of juvenile salmon in estuary; fishery managers/others authorized/required; need confirmation that cost share is sufficient.	BPA 59%	Confirmed
198402500	ODFW Blue Mountain Oregon Fish Habitat Improvement	Blue Mountain	2.3	Multiple fish habitat restoration projects (fencing, planting), appears to be on both private and non-private lands; multiple other entities may be authorized/required; need to confirm confirmation of screening or other criteria to ensure BPA is not funding activities landowner already required to perform; need confirmation that cost-share is reasonable.	BPA 62%	Mixed
198605000	White Sturgeon Mitigation and Restoration in the Columbia and Snake Rivers Upstream from Bonneville Dam	Mainstem/ Systemwide	2.3	White sturgeon mitigation, including stock assessments, monitoring, and transplant supplementation; other entities authorized/required (fishery managers, other hydro operators); need confirmation that cost share sufficient	BPA 88%	Under Dev.
198710001	Umatilla Anad Fish Hab - CTUIR	Columbia Plateau	2.3	Multiple fish habitat restoration projects (barrier removal, LWD etc), not clear if occurring on both private and public lands; multiple other entities may be authorized/required; need to confirm confirmation of screening or other criteria to ensure BPA is not funding activities landowner/others already required to perform; need confirmation that cost-share is reasonable.	BPA 77%	Mixed
198710002	Umatilla Subbasin Fish Habitat Improvement Project	Columbia Plateau	2.3	Habitat improvement projects for fish habitat on private lands. Need confirmation that not applied where landowner under requirement to provide (per BiOp or similar order/requirements).	BPA 100%	

198805308	Hood River Powerdale Dam Fish Trap/Oak Springs/Pelton Ladder - Operation and Maintenance	Columbia Gorge	2.3	O&M for facilities in support of Hood River Production Program, which include BPA interests, as well as other non-federal dam owners (PRB, Powerdale); need cost-share from other dam owners.	BPA 98%	
198806400	Kootenai River Native Fish Restoration and Conservation Aquaculture	Mountain Columbia	2.3	White sturgeon/burbot conservation aquaculture; mitigation for Libby, but other entities (other hydro dam owners) authorized required, may need more cost share	BPA 91%	Mixed
198810804	StreamNet (CIS/NED)	Mainstem/ Systemwide	2.3	Data needs/coordination are authorized/require cost share appears low.	BPA 92%	Mixed
198811525	Ykfp - Design & Construction (Nelson Springs replacement facility)	Columbia Plateau	2.3	Funding for new administrative facility; assuming that this facility utilized for BPA funded-projects RM&E only, then rated a "1"; if utilized for other tribal or other activities, then need cost share or other remedy.	BPA 100%	
198902401	Evaluation of Juvenile Salmonid Outmigration and Survival in the Lower Umatilla River Basin.	Columbia Plateau	2.3	RM&E regarding Umatilla species; fishery managers authorized/require; query whether cost share sufficient	BPA 92%	Mixed
199004400	Coeur D'Alene Reservation Habitat Enhancement (Coeur d'Alene Subbasin)	Intermountain	2.3	Multiple M&E and habitat-related activities; multiple other entities may be authorized/required; need screening or other criteria to ensure BPA no funding activities others required to perform; need confirmation that cost share is appropriate.	BPA 82%	Mixed
199101903	Hungry Horse Mitigation Program	Mountain Columbia	2.3	Multiple activities to address HH resident fish losses-- Sekokini Springs hatchery; plantings, O&M on acquired mitigation habitat; multiple other entities potentially authorized/required; need confirmation of screening or other criteria to ensure BPA not funding activities others required to perform; need confirmation that cost share reasonable.	BPA 74%	Mixed
199107200	Redfish Lake Sockeye Salmon Captive Broodstock Program	Mountain Snake	2.3	Captive broodstock program for preserving redfish lake sockeye; fishery managers authorized/required; need confirmation that cost share is sufficient.	BPA 96%	Under Dev.
199107300	Idaho Natural Production Monit	Mountain Snake	2.3	M&E for chinook populations; fishery managers authorized/required to perform as well; need confirmation that cost share sufficient.	BPA 85%	Mixed
199201000	Habitat Imprvmnt/Enhnmnt - Fort Hall, Idaho	Upper Snake	2.3	Restoration activities (fencing, planting etc) for resident fish habitat/substitution program; appears to be mitigating primarily for non-FCRPS project (American Falls) and sponsor-generated grazing impacts; other entities authorized/required to address (other hydro, tribe, BIA etc)	BPA 74%	Confirmed

199202603	Upper Salmon Basin Watershed Project (USBWP) provides technical and administrative support with project implementation guidance to landowners to implement fish habitat projects on private lands.	Mountain Snake	2.3	Multiple habitat-related activities; multiple other entities may be authorized/required; need screening or other criteria to ensure BPA no funding activities others required to perform; need confirmation that cost share is appropriate.	BPA 76%	Under Dev.
199204000	Redfish Lake Sockeye Salmon Captive Broodstock Rearing and Research	Mountain Snake	2.3	Burley Creek hatchery O&M and RM&E regarding captive broodstock; fishery managers authorized/required; query whether cost share is sufficient	BPA 80%	Confirmed
199206200	Yakama Nation - Riparian/Wetlands Restoration	Columbia Plateau	2.3	Multiple restoration, RM&E, coordination activities; need confirmation that screening or other criteria to ensure BPA is not funding activities others already required to perform; need confirmation that cost share is adequate.	BPA 56%	Mixed
199305600	Research to advance hatchery reform, including captive broodstocks	Mainstem/Systemwide	2.3	General RM&E regarding hatchery programs; fishery managers authorized/required; need confirmation that cost share is reasonable.	BPA 88%	Confirmed
199306600	Oregon Fish Screens Project	Columbia Plateau	2.3	Fish screening on private irrigation facilities; irrigators authorized/required to provide screening; are BPA funds being used to provide screens for entities that are required/have been ordered to replace/upgrade their screens? Need confirmation that cost share sufficient.	BPA 54%	Confirmed
199401806	Tucannon Stream and Riparian Protection, Enhancement, and Restoration	Columbia Plateau	2.3	Multiple restoration activities; multiple other entities potentially authorized/required to conduct; need confirmation that funding not applied for entities already required to conduct the work; also question whether BPA can provide funding directly proponent to lease lands from landowners to extend CREP contracts	BPA 76%	Under Dev.
199404300	Lake Roosevelt Fisheries Evaluation Program (formerly Data Collection)	Intermountain	2.3	M&E of Lake Roosevelt hatchery programs; fishery managers authorized/required as well; need confirmation that cost share is adequate.	BPA 98%	Mixed
199404700	Lake Pend Oreille Fishery Recovery Project: purpose to restore fisheries impacted by the federal hydropower system within the Idaho portion of the Pend Oreille drainage.	Intermountain	2.3	M&E, habitat, predator removal in LPO; fishery managers others authorized/required; need confirmation that cost share is reasonable.	BPA 91%	Under Rev.
199405000	Salmon River Habitat Enhancement	Mountain Snake	2.3	M&E on existing enhanced salmon habitat areas and proposed areas for enhancement; other entities (FS, BLM, mining company) may be authorized/required to conduct M&E work. Consider whether FS portions covered by FS-BPA MOU.	BPA 98%	Confirmed

199405400	Migratory Patterns, Structure, Abundance and Status of Bull Trout Populations in Subbasins of the Columbia Gorge, Columbia Plateau and Blue Mountain Provinces	Mainstem/Systemwide	2.3	Bull trout RM&E; fishery managers authorized/required; need confirmation that cost share is sufficient.	BPA 91%	Mixed
199500400	Libby Mitigation Program	Mountain Columbia	2.3	Multiple fish habitat and passage restoration activities; multiple other entities may be authorized/required; need confirmation of screening or other criteria to ensure BPA not funding activities others are required to perform; need confirmation that cost-share is sufficient.	BPA 85%	Mixed
199501500	Duck Valley Fisheries Project – Operations, Maintenance, Monitoring and Evaluation	Middle Snake	2.3	O&M and RME for BPA-funded resident fish substitution program; while other entities authorized or required to mitigate for blocked area, assume this is BPA share because it is the BPA substitution project (?).	BPA 100%	
199502800	Piscivorous Avian Resource Utilization of Moses Lake and the Relationship to Other Systems	Columbia Plateau	2.3	Avian predation RME on off-site lake; focus appears to be mostly addressing resident fishery concerns; connection to FCRPS impacts unclear; WDFW authorized/required to evaluate; needs cost share review	BPA 91%	Mixed
199506335	YKFP - Klickitat Subbasin Monitoring and Evaluation	Columbia Gorge	2.3	Multiple M&E activities, including stream surveys, telemetry, population counts and analysis; multiple other entities authorized/required; need confirmation that cost share is sufficient.	BPA 93%	Confirmed
199601100	Walla Walla Juvenile and Adult Passage Improvements	Columbia Plateau	2.3	Fish passage projects (screening, ladders etc) for agricultural/irrigation diversions; not clear whether entities receiving the fixes already authorized/required to provide for passage; needs confirmation that cost share adequate	BPA 76%	Under Dev.
199603501	Yakama Reservation Watersheds Project	Columbia Plateau	2.3	Multiple watershed restoration activities; multiple other entities may be authorized/required. Recommend confirmation that no project will occur on lands where the activity is already required; needs review of cost share.	BPA 91%	Mixed
199604000	Mid-Columbia Coho Restoration Project	Columbia Cascade	2.3	Coho restoration/hatchery proposal. Other entities authorized/required to address loss of coho, including non-FCRPS hydro projects, as well as other actors (forestry, irrigation, etc); need confirmation that cost share sufficient	BPA 72%	Confirmed
199604601	Walla Walla River Basin Fish Habitat Enhancement	Columbia Plateau	2.3	Multiple restoration activities and coordination activities; other entities may be authorized/required; need confirmation of screening or other criteria to ensure BPA not funding activities others are required to perform; need confirmation that cost-share is adequate.	BPA 93%	Mixed

199606700	Manchester Spring Chinook Captive Broodstock Project	Multiprovince	2.3	Marine rearing facility O&M for captive broodstock for SR spring/summer chinook; broad support for regional recovery efforts; other entities authorized/required, query whether cost-share sufficient.	BPA 72%	Confirmed
199700100	Idaho Chinook Salmon Captive R	Mountain Snake	2.3	Eagle Lake hatchery O&M, RM&E, Redfish Lake captive broodstock program; other entities authorized/required to address this stock & to perform some of the other functions; query whether cost-share sufficient.	BPA 93%	Under Dev.
199700400	Resident Fish Stock Status Above Chief Joseph and Grand Coulee Dams	Intermountain	2.3	Population M&E, also water quality surveys, for resident fish, Pend Oreille basin; fishery managers/others also authorized/required to perform; need criteria to confirm BPA not funding activities others required to perform; need confirmation that cost share is sufficient.	BPA 91%	Mixed
199701325	Yakima/Klickitat Fisheries Project Operations and Maintenance	Columbia Plateau	2.3	O&M and RM&E on Yakima hatchery-related efforts (Cle Elum, etc); need confirmation that no cost share needed (are activities being proposed that fishery managers authorized/required to perform?)	BPA 100%	
199701335	Klickitat Fishery YKFP O & M	Columbia Gorge	2.3	O&M at Wahkiacus; this appears to be a Mitchell Act hatchery; need to address whether BPA funding is for BPA-related use at a Mitchell Act hatchery, or otherwise in lieu.	BPA 9%	Mixed
199703800	Listed Stock Chinook Salmon Gamete Preservation	Multiprovince	2.3	Cryogenic gene bank for listed SR species; other entities authorized/required to fund (eg fishery managers, other hydro project owners); query whether cost-share sufficient.	BPA 95%	Confirmed
199800200	Snake River Native Salmonid Assessment	Middle Snake	2.3	Population analysis and recovery planning; fishery managers authorized/required; need confirmation that cost-share is sufficient.	BPA 73% (Cost share numbers identified but not contributors)	Under Dev.
199801003	Spawning distribution of Snake River fall Chinook salmon	Blue Mountain	2.3	Monitor the status and distribution of fall Chinook in the Snake River using redd counts; fishery managers authorized/required to do; also other hydro operators (cost share here coming from IPCo); need confirmation that cost share sufficient	BPA 50%	Confirmed
199801400	Ocean Survival Of Salmonids	Mainstem/Systemwide	2.3	RM&E regarding ocean conditions, plume effect; fishery managers, others authorized/required to study; need confirmation that cost share is sufficient	BPA 85%	Confirmed

199801600	Salmonid Productivity, Escapement, Trend, and Habitat Monitoring in the John Day River Subbasin	Columbia Plateau	2.3	RM&E for salmonids in John Day subbasin to support restoration efforts; fishery managers authorized/required; other actors may also be authorized/required; query whether cost-share is sufficient.	BPA 97%	Confirmed
199801700	North Fork/Mid-John Day Fish Passage Improvement	Columbia Plateau	2.3	Fish screening or other passage alternatives for private irrigation facilities/push up dams in creeks; irrigators authorized/required to perform; are BPA funds being used to provide screens or other facilities that are required/have been ordered to replace/upgrade their screens?.	BPA 67%	Under Dev.
199801800	John Day Watershed Restoration	Columbia Plateau	2.3	Multiple watershed restoration activities; multiple other entities authorized/required to perform; need confirmation that screening or other criteria ensures that BPA not funding activities others are required to perform; need confirmation that cost share is adequate	BPA 80%	Mixed
199801900	Wind River Watershed Restoration	Columbia Gorge	2.3	Multiple restoration activities on FS and private lands; assume activities on FS lands covered by BPA-FS MOU (need to confirm); need to confirm that activities occurring on private land landowner not already required to perform.	BPA 81%	
199901000	Pine Hollow/Jackknife Habitat	Columbia Plateau	2.3	Multiple protection and restoration activities, including activities that other entities may be authorized/required to perform (e.g., range management on BLM lands); recommend confirmation of screening to ensure BPA not funding activities where another entity already required to perform.	BPA 75%	Confirmed
199901500	Big Canyon Fish Habitat	Mountain Snake	2.3	Multiple habitat restoration activities, including things like water temperature surveys; multiple other entities authorized/required; need confirmation BPA funding not being utilized for specific practices that other entity required to perform; need confirmation that cost share is sufficient.	BPA 73%	Confirmed
199901600	Protect & Restore the Big Canyon Creek Watershed	Mountain Snake	2.3	Watershed restoration, mix of tribal and private lands; multiple activities proposed; need confirmation BPA funding not being utilized for specific practices that other entity required to perform; need confirmation that cost share is sufficient.	BPA 84%	Confirmed
199901700	Protect and Restore Lapwai Creek Watershed	Mountain Snake	2.3	Watershed restoration, mix of tribal and private lands; multiple activities proposed; need confirmation BPA funding not being utilized for specific practices that other entity required to perform; need confirmation that cost share is sufficient.	BPA 83%	Confirmed

199901900	Restore Salmon River (Challis, Idaho)	Mountain Snake	2.3	Appears to be BPA funding for Army Corps flood control project, and BPA funding is for work the Corps is authorized/required to perform; query whether cost share sufficient.	BPA 30%	Confirmed
199902000	Analyze Chinook Salmon Spatial and Temporal Dynamics and Persistence	Mainstem/Systemwide	2.3	RM&E on chinook needs; fishery managers/others authorized required; is this covered under BPA-FS MOU (then rate as "1"); otherwise, need confirmation that cost-share is sufficient.	BPA 46%	Confirmed
199902500	Sandy River Delta Habitat Restoration	Lower Columbia	2.3	Multiple restoration activities (plantings, invasive weed control) which may occur on federal land (covered by FS-BPA MOU?); also the dike removal (highest expense item) appears to be a City of Portland requirement for compliance with their own HCP, need clarification of how BPA funding is supplementing not in lieu	BPA 54%	Mixed
200000400	Monitor, Protect, and Rehabilitation of Bull Trout and Westslope Cutthroat Trout Habitat in the Upper Kootenay River Subbasin	Mountain Columbia	2.3	Baseline monitoring of resident fish populations and some instream habitat restoration by BC government in Canadian portion of Libby Dam/Lake Kootenay and upper Kootenay tributaries to address impacts of Libby Dam. BC government authorized/required; need confirmation that cost share is adequate; the habitat restoration/LWD component needs further legal review (on-the-ground work in Canada).	BPA 95%	Confirmed
200001200	Evaluate Factors Limiting Columbia River Chum Salmon	Lower Columbia	2.3	RME/basic chum population analysis; fishery managers, other hydro operators also authorized or required to evaluate; query whether cost share is sufficient.	BPA 96%	Under Dev.
200001400	Evaluate Population Dynamics And Habitat Use Of Lampreys In Cedar Creek (Lewis River Subbasin), Washington.	Lower Columbia	2.3	RME/basic lamprey population analysis; fishery managers, other hydro operators also authorized or required to evaluate; query whether cost share is sufficient.	BPA 93%	Under Dev.
200001700	Recondition Wild Steelhead Kelt	Mainstem/ Systemwide	2.3	Kelt reconditioning research; other entities authorized/required to address (fishery managers, other hydro operators); recommend confirmation that cost-share sufficient	BPA 72%	Mixed
200002800	Eval Pacific Lamprey In Clearw	Mountain Snake	2.3	RME/basic lamprey population analysis; fishery managers, other hydro operators also authorized or required to evaluate; query whether cost share is sufficient.	BPA 89%	Mixed
200003100	North Fork John Day Basin Anadromous Fish Habitat Enhancement Project	Columbia Plateau	2.3	Multiple restoration activities; other entities may be authorized/required; need confirmation of screening or other criteria to ensure BPA not funding activities others are required to perform (some covered by BPA-FS MOU?); need confirmation that cost is adequate	BPA 90%	Mixed

200003800	NEOH Walla Walla Hatchery - Three Step Master Planning Process	Columbia Plateau	2.3	Planning costs for proposed Walla Walla hatchery; not clear whether planning costs are all BPA responsibility or also sponsor authorized/required; also not clear if this hatchery in mitigation for FCRPS or for other impacts (irrigation etc) as well; needs costs share or other remedy?	BPA 100%	
200003900	Walla Walla Subbasin Collaborative Salmonid Monitoring & Evaluation Project	Columbia Plateau	2.3	M&E throughout the basin; fishery managers authorized/required; query whether cost share is sufficient	BPA 74%	Confirmed
200102600	Status, Genetics, and Life History of Coastal Cutthroat Trout above Bonneville Dam	Columbia Gorge	2.3	Coastal cutthroat trout sampling above BON to aid in population status evaluation; fishery managers/others required/authorized; need confirmation that cost share adequate.	BPA 90%	Confirmed
200102700	Western Pond Turtle Recovery - Columbia River Gorge - Washington	Columbia Gorge	2.3	Western pond turtle recovery efforts; other entities authorized/required (eg FWS, other actors); query whether cost-share sufficient	BPA 74%	Mixed
200102800	Banks Lake Fishery Evaluation Project	Columbia Plateau	2.3	Multiple M&E and other activities related to kokanee (including water quality sampling and creel surveys); fishery managers others are authorized/required. Need confirmation that cost share is adequate.	BPA 77%	Confirmed
200200800	Reconnect Kootenai River with the historic floodplain	Mountain Columbia	2.3	Multiple restoration activities (channel restoration, floodplain connectivity, dike removal); appears to be predominantly on private land in US; need confirmation that BPA funding not going for activities others already required to address (eg dike owners?); need confirmation that no cost share is okay.	BPA 100%	
200201600	Evaluate the Status of Pacific Lamprey in the Lower Deschutes River Subbasin, Oregon	Columbia Plateau	2.3	Population status of lamprey in Deschutes, including harvest rates; fishery managers, other hydro on Deschutes authorized/required; need confirmation that cost share is reasonable (and/or that cost share from eg PGE is supporting at river-level basis)	BPA 91%	Confirmed
200202700	Forecasting Hydrosystem Operations to Benefit Anadromous Fish Migration	Mainstem/Systemwide	2.3	Computer modeling of hydrosystem, including temperature and other variables; is this an FCRPS activity to be funded outside of direct program? If it's linked mostly to FCRPS may be okay for direct program funding, but if generic to the system, then other hydro operations, as well as fishery managers, water quality managers also authorized/required; need confirmation that no cost share is appropriate.	BPA 100%	
200205300	Assess Salmonids Asotin Cr Ws	Blue Mountain	2.3	Population status analysis; fishery managers authorized/required; query whether cost-share is sufficient here.	BPA 97%	Confirmed

200205400	Protect & Restore the Asotin Creek Watershed	Blue Mountain	2.3	Multiple restoration activities, other entities may be authorized required; need to confirm whether BPA-FS MOU covers some/all and/or confirm that screening or other criteria to ensures BPA funding not being used for specific activities another entity already required to perform; query if cost share sufficient	BPA 82%	Mixed
200205900	Yankee Fork Salmon River Dredge Tailings Restoration Project	Mountain Snake	2.3	Restoration activities (addressing impacts of old dredge mining in particular); unclear if on Forest Service lands (in which case, project covered by BPA-FS MOU?) or on private lands (JR Simplot) in which case would need confirmation that Simplot not already required to address, and that cost share is reasonable.	BPA 82%	Mixed
200206000	Nez Perce Harvest Monitoring	Multiprovince	2.3	Tribal harvest monitoring; fishery managers authorized/required; query whether cost-share sufficient (and it comes from LSRCP--BPA funded portion of LSRCP? Then this might be a "3")	BPA 80%	Confirmed
200207200	Protect & Restore Red River Watershed	Mountain Snake	2.3	Culvert replacement/removal, road improvement/decommissioning; weed control, other restoration activities in Red River Watershed; also land acquisition; appears to be on both private and Forest Service lands; other entities authorized/required; need to confirm that BPA-FS MOU covers FS activities, and then need confirmation that no private land activities already required of that landowner.	BPA 78% (70%)	Mixed
200207400	Protect and Restore Crooked Fork to Colt Killed Analysis Area	Mountain Snake	2.3	Road decommissioning and culverts; appears to be mostly on Clearwater NF; confirm that BPA-FS MOU covers this, and the can be a "1"; otherwise, it would be 2.2 if can confirm that screening or other criteria in place to ensure that specific activities not already required of another entity	BPA 87%	Under Rev.
200300600	Effectiveness Monitoring of Estuary Restoration in the Grays River and Chinook River Watersheds	Columbia Estuary	2.3	M&E for effectiveness of a variety of estuary projects (not just BPA-funded estuary projects); other estuary project producers authorized/required to evaluate effectiveness; query whether cost-share here is sufficient.	BPA 89%	Under Rev.
200301300	Grays River Watershed Restoration	Columbia Estuary	2.3	Multiple restoration activities (engineered logjams) in estuary focused on chum; need to confirm that screening or other criteria to ensures BPA funding not being used for specific activities another entity is required to perform; need to check that cost share reasonable	BPA 90%	Mixed

200301700	Integrated Status and Effectiveness Monitoring Program (ISEMP): The design and evaluation of monitoring tools for salmon populations and habitat in the Interior Columbia River Basin.	Mainstem/ Systemwide	2.3	M&E for status/trend of salmonid/steelhead; multiple other entities authorized/required (e.g., fishery managers, others); need confirmation that cost-share is reasonable.	BPA 68%	Mixed
200302200	Okanogan Basin Monitoring and Evaluation Project (OBMEP)	Columbia Cascade	2.3	M&E for long-term status/trend for anadromous fish in Okanogan; fishery managers authorized/required as well; need confirmation that cost share sufficient.	BPA 74%	Mixed
200302300	Chief Joseph Hatchery Program	Columbia Cascade	2.3	Hatchery in mitigation for FCRPS, but also mitigating other sources; need confirmation that cost share adequate & not supplanting authorization/requirements of, e.g., Corps for appropriations for hatchery mitigation for Chief Joseph, or Reclamation for Grand Coulee.	BPA 97%	Mixed
200303600	CBFWA Collaborative Systemwide Monitoring and Evaluation Program	Mainstem/ Systemwide	2.3	Systemwide M&E; confirm that cost share is appropriate.	BPA 78%	Mixed
200303900	Monitor Repro In Wenat/Tuc/Kal	Columbia Cascade	2.3	M&E of the relative reproductive success and survival of naturally spawning hatchery and natural origin spring Chinook salmon in the Wenatchee River watershed above Tumwater Dam; fishery/hatchery managers, others authorized/required; need confirmation that cost share sufficient.	BPA 78%	Under Dev.
200306200	Evaluate the Relative Reproductive Success of Reconditioned Kelt Steelhead	Mainstem/Systemwide	2.3	Comparative M&E regarding the reproductive success of reconditioned kelt steelhead; fishery/hatchery managers authorized/required; need confirmation that cost share is sufficient.	BPA 86%	Confirmed
200306500	Klickitat River Cooperative Evaluation Program (Formerly Bull Trout Presence, Origin, and Movements In Bonneville Reservoir)	Columbia Gorge	2.3	Population baseline M&E for salmon/bull trout in the Klickitat River; fishery managers authorize/required; need confirmation that cost share is sufficient.	BPA 86% (Not counting the cost share attributed to BPA.)	Confirmed
200307200	Habitat and Biodiversity Information System For Columbia River Basin	Mainstem/ Systemwide	2.3	Habitat and "biodiversity" database for planning and monitoring; multiple other entities authorized or required to maintain this information; query whether cost share is too low or is this the kind of "glue" that no one else supports and that BPA can?	BPA 95%	Confirmed

198201302	Annual Stock Assessment - Coded Wire Tag Program (ODFW)	Mainstem/ Systemwide	3.0	Apply coded-wire tags to production releases of coho and chinook salmon at ODFW Columbia Basin hatcheries for stock assessment of hatchery and wild salmon populations. Evaluate survival, contribution and stray rates of hatchery reared salmon; fishery managers authorized/required; needs cost share or other remedy.	BPA 100%	
198201303	Coded Wire Tag - USFWS	Mainstem/ Systemwide	3.0	The Coded-Wire Tag (CWT) Recovery Project is an on-going data collection and data management program by ODFW, WDFW, and PSMFC that contributes to the annual assessment of hatchery and wild salmon populations throughout the Columbia Basin. Fishery managers authorized/required; needs cost share or other remedy.	BPA 100%	
198201304	Coded Wire Tag - WDFW	Mainstem/ Systemwide	3.0	Apply coded-wire tags to production of coho and chinook salmon at WDFW Columbia Basin hatcheries for stock assessment of hatchery and wild populations. Evaluate survival, contribution and stray rates of hatchery reared fish and compare to wild fish. Fishery managers authorized/required.	BPA 100%	
198343600	Umatilla Passage O&M	Columbia Plateau	3.0	O&M of BPA-funded fish facilities at irrigation dams on the Umatilla; irrigators authorized/required to operate and maintain; needs cost share or other remedy.	BPA 100%	
198402100	Mainstem, Middle Fork, John Day Rivers Fish Habitat Enhancement Project	Columbia Plateau	3.0	Multiple fish habitat restoration projects (fencing, water development for livestock), appears to be on both private and public lands; multiple other entities may be authorized/required; need confirmation of screening or other criteria to ensure BPA is not funding activities landowner already required to perform; need confirmation that no cost-share is reasonable.	BPA 100%	
198506200	Juvenile Fish Screen Evaluations in Columbia Plateau Province	Columbia Plateau	3.0	Evaluation of effectiveness/compliance with NMFS standards of fish screens owned by multiple entities; multiple other entities authorized/required to monitor their fish screens; needs cost share or some other remedy.	BPA 100%	
198805304	Hood River Production Program - ODFW M&E	Columbia Gorge	3.0	Monitor and evaluate actions taken to re-establish spring chinook salmon, and improve wild production of summer and winter steelhead, in the Hood River subbasin. Data will be used to develop, and refine, management objectives for the HRPP; fishery managers authorized/required; needs cost share or other remedy.	BPA 100%	

198805315	Hood River Adult Salmonid Trapping Facilities/Parkdale Fish Facility Expansion	Columbia Gorge	3.0	Funding to investigate alternative trapping facilities in support in support of Hood River Production Program, which include BPA interests, as well as other non-federal dam owners (PRB, Powerdale); need cost-share from other dam owners or other remedy.	BPA 100%	
198806500	Kootenai R White Sturgeon Inve	Mountain Columbia	3.0	Multiple monitoring and coordination efforts to address multiple species; multiple other entities may be authorized/required; need to confirm that BPA funding not funding activities other entities required to perform, and/or confirm that all activities funded by BPA addressing specific monitoring/coordination in relation to Libby operations/effects; otherwise needs cost share or other remedy.	BPA 100%	
198812025	Ykfp Management, Data, Habitat	Columbia Plateau	3.0	Multiple restoration, RM&E, coordination activities; need confirmation that screening or other criteria to ensure BPA is not funding activities others already required to perform; otherwise, need cost share or other remedy.	BPA 100%	
198909600	Genetic Monitoring of Snake River Chinook Salmon and Steelhead	Mainstem/ Systemwide	3.0	Genetic monitoring, wild/hatchery interactions; fishery managers authorize/required; needs cost share or other remedy.	BPA 100%	
198909800	Idaho Supplementation Studies	Mountain Snake	3.0	Supplementation evaluation in Idaho; fishery managers/others authorized/required; needs cost share or other remedy.	BPA 100%	
198910700	Statistical Support For Salmonid Survival Studies	Mainstem/ Systemwide	3.0	Statistical support provided to fishery investigators through ough the basin, on request; fishery managers, others, authorized/required. [FPC?] Needs cost share or other remedy.	BPA 100%	
199000500	Umatilla Hatchery - M&E	Columbia Plateau	3.0	M&E for Umatilla Hatchery; M&E addresses issues broader than Umatilla hatchery, so fishery managers authorized/required; needs cost share or other remedy?	BPA 100%	
199005500	Idaho Steelhead Monitoring and Evaluation Studies	Mountain Snake	3.0	Steelhead M&E, fishery managers authorized /required; needs cost share or other remedy	BPA 100%	
199008000	Columbia Basin Pit-Tag Information System.	Mainstem/Systemwide	3.0	PTAGIS; O&M and other support for central PIT tag infrastructure; other entities authorized/required (NMFS, entities utilizing PIT tag programs); need cost share or other remedy.	BPA 100%	
199105100	M&E Statistical Support For Life-Cycle Studies	Mainstem/ Systemwide	3.0	Statistical support for M&E for recovery efforts; multiple other entities authorized/required (eg fishery managers, other hydro operators) [FPC?]	BPA 100%	

199107100	Snake River Sockeye Salmon Habitat and Limnological Monitoring	Mountain Snake	3.0	RM&E supporting SR sockeye; fishery managers authorized required as well; needs cost share or other remedy.	BPA 100%	
199200900	Yakima Phase II/Huntsville Screen Operation & Maintenance	Columbia Plateau	3.0	O&M on BPA-funded fish screens in Yakima basin; need confirmation that BPA has committed to O&M for these (eg BiOp purposes?), otherwise irrigators authorized/required to O&M screens and cost share or other remedy required.	BPA 100%	
199202604	Investigate Life History Of Spring Chinook Salmon and Summer Steelhead in the Grande Ronde River Subbasin	Blue Mountain	3.0	M&E for chinook populations; fishery managers authorized/required to perform as well; need cost share or other remedy..	BPA 100%	
199401500	Idaho Fish Screening and Passage Improvements	Mountain Snake	3.0	Fish screening, irrigation consolidation, other activities; multiple other entities may be authorized/required; need cost share or other remedy.	BPA 100%	
199402600	Pacific Lamprey Research and Restoration Project	Columbia Plateau	3.0	RM&E regarding lamprey in the Umatilla; other entities (fishery managers, irrigation entities etc) authorized/required to address impacts to lamprey in tributary; may be okay with additional cost-share from other entities, or clearer link to how this mitigates for impacts to lamprey from FCRPS.	BPA 100%	
199500100	Kalispel Tribe Resident Fish P	Intermountain	3.0	Resident fish program; portion appears to include specific mitigation for Box Canyon dam, a non FCRPS dam; need cost share (Pend Oreille PUD?) or other remedy.	BPA 100%	
199503300	O&M Yakima Basin Fish Screens	Columbia Plateau	3.0	O&M on Phase II Yakima screens; need confirmation that BPA has committed to O&M, otherwise this needs cost share or other remedy.	BPA 100%	
199505700	S Idaho Wildlife Mitigation	Upper Snake	3.0	O&M and M&E for wildlife mitigation lands; some activities may be responsibility of landowner per MOAs (eg noxious weeds); also need to ensure BPA is not funding activities on BLM-owned lands that BLM already authorized/required to perform; needs cost share or other remedy?	BPA 100%	
199506325	Yakima Klickitat Fisheries Project - Monitoring And Evaluation	Columbia Plateau	3.0	M&E for YKFP, including supplementation research & reintroduction research; fishery managers authorized/required; needs cost share or other remedy.	BPA 100%	
199506425	YKFP Policy/Plan/Technical	Columbia Plateau	3.0	Funding for WDFW to participate in YKFP (policy, technical etc). Since coordination here benefits WDFW in its own management responsibilities, i.e., it is authorized/required to provide support here as well; this needs some cost share or other remedy. [Compare with other coordination proposals?]	BPA 100%	

199600500	ISAB	Mainstem/Systemwide	3.0	Independent science review for Council, NMFS, and CRITFC. Because services provided to NMFS and CRITFC, who are authorized to support, this needs cost share or other remedy.	BPA 100%	
199602100	Gas Bubble Disease Reseach & Monitoring of Juvenile Salmonids	Mainstem/ Systemwide	3.0	Gas bubble monitoring; not clear if only at FCRPS. If not, then other entities authorized/required (e.g., Mid Columbia PUDs) for at least a portion.	BPA 100%	
199604200	Restore and Enhance Anadromous Fish Populations and Habitat in Salmon Creek	Columbia Cascade	3.0	Water leasing and reconnection of stream to address impacts of irrigation dam; Bureau of Reclamation, irrigation district authorized required as well; needs cost share or other remedy.	BPA 100%	
199604300	Johnson Creek Artificial Propation Enhancement Project	Mountain Snake	3.0	Small supplementation & extensive M&E program addressing particular stock; unclear how direct the link is to FCRPS only; other entities authorized/required to address supplementation issues (eg fishery managers); needs cost share or other remedy	BPA 100%	
199609401	Scotch Creek Wildlife Area	Columbia Cascade	3.0	Multiple land & recreation management (parking etc) activities on state-owned & managed habitat; not clear if this is BPA-funded acquired lands for wildlife mitigation or combination. Need to separate BPA-funded from state-acquired, and also clarify which activities are appropriate for BPA fish/wildlife mitigation funding and which are responsibility of the state as landowner (note proponent also asserts that "The BPA accepted full operations and management of the project in 1997").	BPA 100%	
199701100	Shoshone-Paiute Habitat Enhanc	Middle Snake	3.0	Multiple restoration activities; other entities may be authorized/required to conduct; also, basic premise is to address impacts in blocked areas; blockage is not solely due to FCRPS, so other hydro projects authorized/required to address; needs cost share or other remedy.	BPA 100%	
199701900	Evaluate the Life History of Native Salmonids in the Malheur Subbasin	Middle Snake	3.0	Population analysis; fishery managers/land managers authorized/required; need cost share or other remedy.	BPA 100%	
199703000	Chinook Salmon Adult Abundance Monitoring [Formerly - Listed Stock Adult Escapement]	Mountain Snake	3.0	Wild adult salmon stock abundance; other entities (fishery managers) authorized required to conduct this work. Needs cost share or some other remedy.	BPA 100%	
200003300	Walla Walla River Fish Passage Operations	Columbia Plateau	3.0	Coordination and other O&M efforts for Walla Walla irrigation diversions; other entities (irrigators) and fishery managers authorized/required; need to address whether cost-share or other remedy needed	BPA 100%	

200103200	Coeur D'Alene Fisheries Enhancement, Hangman Creek	Intermountain	3.0	Restoration work (channel realignment, plantings etc) for fish habitat on tribal lands; assume tribe/BIA is authorized, but not required) to address; does this need cost share? [Argument for yes: tribe/BIA is authorized, if not required, to address health of reservation land, so like any other governmental landowners, eg FS, state, expect some cost share; argument for no: tribe/bia may be authorized, but assuming no specific requirement to conduct this channel realignment work, and giving deference to tribal trust/other tribal policies, no cost share necessary]	BPA 100%	
200203000	Develop Progeny Marker for Salmonids to Evaluate Supplementation	Columbia Plateau	3.0	RM&E to address supplementation issues; fishery managers authorized/required; some cost share or other remedy needed	BPA 100%	
200203100	Growth modulation in salmon supplementation	Columbia Plateau	3.0	RM&E to address early (too) male maturation in supplementation programs (help improve SAR); fishery managers, other hydro operators authorized/required; need cost share or other remedy.	BPA 100%	
200203700	Freshwater Mussel Research and Restoration Project	Columbia Plateau	3.0	RM&E for freshwater mussel issues in Umatilla; fishery managers/others authorized/required to address; some cost share or other remedy needed	BPA 100%	
200301000	Historic Habitat Opportunities and Food-Web Linkages of Juvenile Salmon in the Columbia River Estuary and Their Implications for Managing River Flows and Restoring Estuarine Habitat	Columbia Estuary	3.0	Multiple research activities to address historic/ongoing changes in estuarine habitat; NMFS, and others authorized or required to conduct this work. Need cost share or other remedy.	BPA 100%	
200302900	Assess the feasibility of the Upper Malheur Watershed to support the reintroduction of anadromous Fish populations above the Beulah and Warm Springs Reservoirs.	Middle Snake	3.0	Assessment of feasibility of reintroduction above non-FCRPS dams; fishery managers, BIA, other hydro operators authorized/required to perform; need cost share or other remedy.	BPA 100%	
200305000	Eval Of Reprod Of Steelhead	Mainstem/ Systemwide	3.0	RM&E of reproductive success of wild vs naturally spawning hatchery steelhead; fishery managers also authorized/required; needs cost share or other remedy.	BPA 100%	
200305400	Repro Of Steelhead In Hood Riv	Mainstem/ Systemwide	3.0	RM&E regarding supplementation efficacy using Hood River populations; other entities authorized/required (fishery managers); need cost share or other remedy	BPA 100%	

200306000	Evaluating relative reproductive success of wild and hatchery origin Snake River fall Chinook spawners upstream of Lower Granite Dam	Mainstem/ Systemwide	3.0	RM&E regarding relative reproductive success of hatchery vs wild; other entities authorized/required (fishery managers); needs cost share or other remedy	BPA 100%	
200500200	Operation of the Lower Granite Dam Adult Trap	Mainstem/ Systemwide	3.0	O&M, M&E for LGR trap; information will be used for US v Oregon and related harvest programs; fishery managers authorized/required; query whether this needs cost share or other remedy	BPA 100%	
200600100	Mcintyre Dam Feasibility Study	Columbia Cascade	3.0	Providing fish passage at Canadian dam; need to confirm that BC law does not require hydro dams to provide fish passage, and if it does not, whether cost share is appropriate; appears unreasonable.	BPA 91%	Under Dev.