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
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%	
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%	
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. Upon review, COTR confirms activities occurring on private land. Rating not changed pending review of cost-share levels generally.	BPA 100%	
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
198503800	Colville Hatchery	Intermountain	1.0	Resident fish substitution in mitigation for FCRPS.	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%	
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%	
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
198805304	√	Hood River Production Program - ODFW M&E	Columbia Gorge	1.0	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. Following preliminary analysis, discussion with COTR confirmed that this proposal, like companion projects for the HRPP, is in mitigation for the FCRPS. Rating changed from a "3" to a "1."	BPA 100%	
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
198805307		Hood R Prod O&M - Ws/ODFW	Columbia Gorge	1.0	Restore and maintain populations of summer and winter steelhead, and reestablish 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%	
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 (Powerdale); on review, this will remain a "2.3" but may change to a 1" rating once Powerdale removed.	BPA 98%	
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%	
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

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%	
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%	
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%	
198812025	√	Ykfp Management, Data, Habitat	Columbia Plateau	2.1	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. Upon review, project identified as fundamentally a coordination contract (see companion at 199506425) and as such rating changed to conform to all other coordination contracts. Rating changed from "3.0" to "2.1."	BPA 100%	
198812035		YKFP Klickitat Management, Data, and Habitat	Columbia Gorge	2.2	RM&E and O&M for YFKP; Mitchell Act funding is cost share; recommend confirmation that cost-share appropriate	BPA 46%	Confirmed
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
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
198906201		Annual Work Plan CBFWA	Mainstem/ Systemwide	2.1	Coordination/travel costs for fish and wildlife managers (managers authorized/required)	BPA 75%	Confirmed
198909600	1	Genetic Monitoring of Snake River Chinook Salmon and Steelhead	Mainstem/ Systemwide	2.3	Genetic monitoring, wild/hatchery interactions; fishery managers authorize/required; needs cost share or other remedy. Following preliminary review, sponsor asserts 20 percent cost share, though will need review/confirmation that it is acceptable (all "in kind"?). Rating changed from"3.0" to "2.3".	BPA 80%	
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 ought the basin, on request; fishery managers, others, authorized/required. Needs cost share or other remedy. Upon review, BPA concludes that the rating could be changed to a "1" if BPA funding were focused on support of either fish and wildlife program or AFEP research or monitoring.	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%	
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
199001800		Lake Roosevelt Rainbow Tr Hab/Pass Impr Prog	Intermountain	1.0	Resident fish substitution in mitigation for FCRPS.	BPA 100%	
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
199004401		Lake Creek Land Acquisition	Intermountain	1.0	Wildlife habitat mitigation for Albeni Falls credited with HUs	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%	
199007700		Dev Of Systemwide Predator Control for Northern Pikeminnows.	Mainstem/Systemwide	1.0	Pikeminnow predator control; direct mitigation for FCRPS.	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%	
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%	
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%	
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
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%	
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
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%	
199105100	1	M&E Statistical Support For Life-Cycle Studies	Mainstem/ Systemwide	1.0	Statistical support for M&E for recovery efforts; multiple other entities authorized/required (eg fishery managers, other hydro operators). Note: this rating changed from a "3" to a "1" because internal BPA review indicates that the proposal is focused primarily on specific FCRPS M&E efforts.	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	<b>V</b>	Swanson Lake Wildlife Mitigation Project (Swanson Lakes Wildlife Area)	Columbia Plateau	3.0	O&M and enhancement on wildlife habitat mitigating for Grand Coulee, assume requested funds consistent with terms of MOA; upon further review, BPA has concerns that sponsor has been applying BPA funds in lieu of state funds; will need cost share or other resolution. Rating changed from "1" to a "3".	BPA 100%	
199106200		Spokane Tribe Wildlife Mitigation	Intermountain	1.0	Habitat acquisition for mitigation of wildlife	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%	
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
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%	
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%	

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
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
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
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%	
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
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
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
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
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%	
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
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
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
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%	
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

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.
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
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%	
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
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
199404400	<b>V</b>	Enhance, protect and maintain shrub-steppe habitat on the Sagebrush Flat Wildlife Area (SFWA)	Columbia Cascade	3.0	O&M, and some enhancement on wildlife mitigation habitat lands; assume requested funds consistent with terms of MOA/ Upon further review, BPA concerned that sponsor has been applying BPA funds in lieu of state funds; will need cost share or other resolution. Rating changed from "1" to a "3".	BPA 100%	
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.
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%	
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
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
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%	
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
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.
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%	

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
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
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	<b>V</b>	S Idaho Wildlife Mitigation	Upper Snake	1.0	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. This was confirmed by COTR, so rating changed from a "3" to a "1."	BPA 100%	
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%	
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%	
199506335		YKFP - Klickitat Subbasin Monitoring and	Columbia Gorge	2.3	Multiple M&E activities, including stream surveys, telemetry, population counts	BPA 93%	Confirmed
199506425	√	YKFP Policy/Plan/Technical	Columbia Plateau	2.1	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. Upon review, rating was changed to reflect similar rating for all other coordination contracts; rating changed from "3" to "2.1".	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%	
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.
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. (Query: is LSRCP the cost-share?)	BPA 92%	Under Rev
199602100	<b>√</b>	Gas Bubble Disease Reseach & Monitoring of Juvenile Salmonids	Mainstem/ Systemwide	1.0	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. Upon review, BPA confirms that this is for the FCRPS, so rating changed from a "3" to a "1."	BPA 100%	
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

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%	
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
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
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
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.
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
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
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. Upon review, concerns that sponsor not funding consistent with the MOA resulting in BPA funding of activities in lieu of the state. Will require cost-share or other resolution. Rating retained as "3."	BPA 100%	
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

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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%	
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
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
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%	
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
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%	
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
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
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%	
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.
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%	
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%	
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%	

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
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.
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%	
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
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
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.
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%	
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	<b>V</b>	Restore Salmon River (Challis, Idaho)	Mountain Snake	2.1	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. Upon review, COTR corrections as to nature of project (BPA funds acquisitions, Corps performs restoration, cost share is appropriate). Rating changed from "2.3" to "2.1".	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
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.
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 Koocanusa 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
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
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.
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
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
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
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
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%	
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
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 of 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
200100300	Adult Pit Detector Installatio	Mainstem/ Systemwide	1.0	PIT tag interrogation systems for FCRPS dams.	BPA 100%	
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
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
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
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%	
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%	
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.

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. (Query: is cost-share from another BPA-funded project?)	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
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
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
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%	
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
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
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)(cost-share percentage excludes cost share from another BPA-funded project)	BPA 91%	Confirmed
200201800	Tapteal Greenway Riparian Corridor Enhancement, Protection and Education OutreachPhase 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
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
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
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%	
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%	
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	1	Growth modulation in salmon supplementation	Columbia Plateau	2.2	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. Upon review, COTR provided corrections including cost-share that sponsor had erroneously not included. Rating changed from "3.0" to "2.2"	BPA 64%	
200203200	1	Snake River fall Chinook salmon life history investigations	Mainstem/Systemwide	2.1	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. (Cost-share confirmed & corrected to range depending on PIT tag purchases; range is from 30-70%) Rating changed from "2.3" to "2.1."	BPA 70%	Confirmed
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
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
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%	
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%	
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
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 LSRCPBPA funded portion of LSRCP? Then this might be a "3")	BPA 80%	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
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

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.
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
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.
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
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%	
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
200301200	1	Shillapoo Wildlife Area	Lower Columbia	2.3	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA. Upon review, BPA concerned that funding is being applied in lieu of state funding; may need additional cost share or other resolution.  Rating changed from a "1" to a "2.3"	BPA 32%	Confirmed
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	<b>V</b>	Integrated Status and Effectiveness Monitoring Program (ISEMP): The design and evaluation of monitoring tools for salmon poplations and habitat in the Interior Columbia River Basin.	Mainstem/ Systemwide	2.2	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. Note: rating changed on final review from a 2.3 to a 2.2 because internal BPA review indicated that a significant part of the project relates to assessing offsite improvements for FCRPS mitigation.	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
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%	

200303600	CBFWA Collaborative Systemwide Monitoring and Evaluation Program	Mainstem/ Systemwide	2.3	Systemwide M&E confirm that cost share is appropriate.	BPA 78%	Mixed
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%	
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.
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%	
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%	
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
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
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
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; Canadian law authorizes installation of fish passage if Minister finds in the public interest, but none has apparently been required yet here; although this proposal does provide some cost share, following review, BPA does not consider the level of cost share reasonable or sufficient under the circumstances and so the rating is unchanged from the preliminary review.	BPA 91%	Under Dev.

200600300	<b>V</b>	Desert Wildlife Area O&M (Wetland Enhancement)	Columbia Plateau	2.3	Wetland enhancement on BPA-funded mitigation lands; assume costs consistent with MOA requirements. Upon review, BPA concerned that funding is being applied in lieu of state funding; will need additional cost share or other resolution. Rating changed from a "1" to a "2.3".	BPA 75%	Confirmed
200600400	√	Wenas Wildlife Area O&M	Columbia Plateau	3.0	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA. Upon review, BPA concerned that funding is being applied in lieu of state funding; will need additional cost share or other resolution. Rating changed from a "1" to a "3".	BPA 100%	
200600500	√	Asotin Creek Wildlife Area O&M (Schlee Acquisitions)	Blue Mountain	2.3	O&M on BPA-funded wildlife mitigation site; assume requested funds consistent with terms of MOA. Upon review, BPA concerned that funding is being applied in lieu of state funding; will need additional cost share or other resolution. Rating changed from a "1" to a "2.3".	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 proption of cost share was MFWP and not just BPA.]	Confirmed
200700100		Aquatic survey protocol comparison.	Mainstem/Systemwide	1.0	General aquatic survey protocols; assume covered by MOU	BPA 70% (84)	Under Dev.
200700300		Dworshak Dam Resident Fish Mitigation	Mountain Snake	1.0	FCRPS mitigation; strobes	BPA 80%	Under Dev.
200700700		Determine Status and Limiting Factors of Pacific Lamprey in Fifteenmile Subbasin, Oregon	Columbia Gorge	2.3	Lamprey research, fishery managers, other hydro ops authorized/required	BPA 84%	Mixed
200700900		A Spatially Explicit & Web-accessible Database for Managing the Impacts of Expanding Colonial Waterbird Populations on Juvenile Salmonids (Oncorhynchus spp.) in the Columbia River Basin	Mainstem/Systemwide	2.3	Avian predation database; fishery managers, others authorized/required	BPA 79%	Confirmed
200701300		Convert BPA Term Riparian Lease Agreements to Permanent Riparian Conservation Easements	Columbia Plateau	1.0	Purchase perpetual riparian easements where BPA provided riparian fencing previously; assume wildlife HUs	BPA 91%	Mixed
200701400		Stock specific run timing and upstream migration mortality of adult Chinook and sockeye salmon and steelhead through PIT tagging and genetic analyses at Bonneville Dam.	Mainstem/Systemwide	2.3	Stock specific run timing; fishery managers authorized/required	BPA 82%	Confirmed
200701700		Lower Columbia Slough Off-Channel and Floodplain Habitat Restoration Project - Phase Two	Lower Columbia	2.1	Floodplain restoration on Portland-owned property, city and Corps authorized/required	BPA 20%	Mixed
200701800		Stock Assessment for salmon, steelhead, and other fish species in Lower Crab Creek, Wshington	Columbia Plateau	2.3	Population research, fishery managers required/authorized	BPA 96%	Mixed
					Close piping of irrigation, other efficiencies (assuming irrigators not required to		
200702000		Manastash Instream Flow Enhancement	Columbia Plateau	1.0	do)	BPA 88%	Mixed

200702300		Integrated Fruit Production in Fifteenmile and Hood River Subbasin Orchards	Columbia Gorge	3.0	Pesticide impacts, other entities authorized/required (eg EPA, NMFS; state DEQs, agricultural users, etc)	BPA 100%	
200702400		Coeur d'Alene Trout Ponds	Intermountain	1.0	Trout ponds to replace lost fishery; assume this is for FCRPS and Avista will be providing additional ponds via relicensing	BPA 96%	Confirmed
200702500		Project Compliance Monitoring	Mainstem/Systemwide	1.0	Independent compliance monitoring of BPA-funded Council projects	BPA 100%	
200702600		Historic Changes in Organic Nutrient Sources and Productivity Proxies in the Columbia River Estuary in Relation to Juvenile Salmon Habitat Restoration Priorities	Columbia Estuary	2.2	Nutrient research, fishery managers, others authorized/required	BPA 65%	Confirmed
200702700		Colville Confederated Tribes Acquisition Project	Intermountain	1.0	FCRPS wildlife mitigation project	BPA 100%	
200702800		Pend Oreille River Basin Watershed Protection and Enhancement Project	Intermountain	2.3	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 73%	Mixed
200703000		Determination of steelhead smolt production and smoltification genes in the Yakima River	Columbia Plateau	3.0	Yakima River smolt research, other entities authorized/required (eg fishery managers)	BPA 100%	
200703100		Identifying prioritized action plans from subbasin strategies using a scenario-based decision support system	Lower Columbia	2.2	Refinement of "decision support system" for aquatic habitat recovery; multiple entities authorized/required	BPA 55%	Mixed
200703200	<b>V</b>	Potential effects of the invasive New Zealand mudsnail in tributaries of Bonneville Reservoir and the Deschutes River, (Potamopyrgus antipodarum).	Columbia Gorge	2.3	Invasive species effects, multiple entities authorized/required. Original rating was a "3" because USFWS others authorized (and funding) research regarding effects of NZMS colonization. In reply to Council recommendations, sponsor indicated cost-share had been found. Rating changed accordingly from a "3" to a "2.3".	BPA 93%	
200703300		Monitor sub adult and adult bull trout passage through Lower Granite, Little Goose and Lower Monumental juvenile bypass facilities.	Mainstem/Systemwide	1.0	FCRPS bypass monitoring	BPA 100%	
200703400		Columbia Cascade Pump Screen Correction	Columbia Cascade	2.3	Correcting irrigation screens; irrigators authorized/required to do (assuming impacting listed fish)	BPA 96%	Mixed
200703500		UPA Project - Methow Basin Riparian Enhancement	Columbia Cascade	1.0	Riparian fencing/planting, mostly on private; assume that some in lieu problem sites (eg fencing at WDFW managed campground) excluded from funding	BPA 85%	Confirmed
200703600		Mid-Columbia Trophic Dynamics Project	Columbia Cascade	3.0	Other entities required (eg non-fed Mid-Columbia project operators)	BPA 100%	
200703700	√	North Fork Toutle River Fish Passage	Lower Columbia	2.3	Mitigation for non-FCRPS COE sediment control structure, Corps authorized if not required. Note that rating changed from a "3" to a "2.3" in the final rating due to cost share now identified for the project. Although cost-share is relatively high, rated a 2.3 given the assumption that the Corps has authorization and funding to evaluate means to address ecosystem function in this area, including to address impacts from emergency flood control projects such as this.	BPA 38%	Mixed
200703800		Preserving/Enhancing Bull Trout and Westslope Cutthroat Trout within the Upper Pend Oreille Basin.	Intermountain	2.3	Population analysis, limiting factors; fishery managers, Avista authorized/required	BPA 78%	Under Rev.
200704000		Upper Columbia Landowner Incentive Program	Intermountain	1.0	Proposed WDFW competitive grant program for private landowners doing various habitat restoration activities; assume program will exclude projects for which landowner may be required to perform the restoration	BPA 92%	Mixed
200704100		Kalispell Riparian Road Removal	Intermountain	1.0	Road decommissioning of FS road); assume covered by BPA-FS MOU	BPA 70% (64)	Mixed
200704200		UPA Wenatchee Passage Program	Columbia Cascade	1.0	Road decommission/culvert replacement on FS lands; assume covered by BPA-FS MOU	BPA 70% (87)	Confirmed
200704300		Lower Columbia Fish Enhancement Group Community-Based Multi-Sub-Basin Habitat Restoration Program	Lower Columbia	2.1	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 9%	Mixed

200704400	Kettle River Tributaries Riparian Habitat Improvement Project	Intermountain	1.0	Offstream water sources on NFS land for grazing mitigation; assume covered by FS MOU	BPA 70%	Confirmed
200704500	Beebe Property Upland, Riparian, and Wetland Enhancements	Columbia Cascade	2.2	Vegetation, channel restoration on WDFW owned property near WDFW Chelan Falls hatchery: WDFW authorized/required to address	BPA 59%	Confirmed
200704600	Steelhead Spawning Ground Surveys, Flow, and Temperature Monitoring of Small Tributaries of the Upper Middle Mainstem Columbia River.	Columbia Cascade	2.3	Population/status monitoring; fishery managers authorized/required	BPA 87%	Confirmed
200704700	Hydrography Spatial Data Enhancement Project - WDFW & WDNR Operational Data Updates and Integration to the PNW Hydrography Clearinghouse for the WA Columbia Basin	Mainstem/Systemwide	3.0	Database improvements for WA policy/technical integration, WA state required	BPA 100%	
200704800	Transboundary Watershed Coordination in the Kootenai River Basin	Mountain Columbia	3.0	Expansion of coordinating office, multiple entities authorized/required (other entities in the network)	BPA 100%	
200704900	Efficacy of carcass analogs for restoring the productivity of nutrient limited salmonid streams	Columbia Gorge	2.3	Evaluation carcass analogs(hatchery) for nutrient deposition; fishery managers, others authorized/required	BPA 97%	Confirmed
200705100	Assessment of Interactions between Hatchery and Wild Summer Steelhead in the John Day River Subbasin	Columbia Plateau	2.3	Hatchery interactions with wild fish; fishery managers authorized/required	BPA 77%	Mixed
200705200	Chum Salmon Evaluations Within Bonneville Reservoir	Columbia Gorge	1.0	BON reservoir monitoring	BPA 78%	Mixed
200705300	Upper Lolo Creek Watershed Restoration	Mountain Columbia	1.0	FS road mitigation; assume covered by BPA-FS MOU	BPA 70%(75)	Mixed
200705400	Entiat River - UPA - Stillwater Restoration Project	Columbia Cascade	1.0	Provide LWD, plantings for riparian restoration on private lands, assume no other entities authorized/required to install here (i.e., no order from state agencies/others to private entities for addressing Christmas tree/anchoring?)	BPA 87%	Confirmed
200705500	Entiat River - UPA - Lower Entiat River Off- Channel Restoration Project	Columbia Cascade	2.3	Multiple irrigation passage fixes, assume irrigators authorized/required	BPA 96%	Confirmed
200705600	IDL Pend Oreille Area Fish Passage #2	Intermountain	3.0	Culvert replacements, county roads (IDL required)	BPA 95%	Confirmed
200705700	Potlatch River Basin Conservation Easement	Mountain Snake	3.0	Conservation easement acquisition for anadromous fish, mitigating for industrial timber company; timber company authorized/required (note too, no crediting for capital anadromous fish habitat acquisitions)	BPA 100%	
200705900	Abiotic and Biotic Factors Affecting the Success of Reintroductions of Anadromous Salmonids in Cle Elum Lake, Washington	Columbia Plateau	3.0	Research for re-introduction due to irrigation dam blockage (Cle Elum Lake), other entity required to address (Reclamation; fishery managers)	BPA 100%	
200706000	Lake Pend Oreille Invasive Fish	Intermountain	3.0	Invasive fish evaluation/management, Idaho DFG authorized/required	BPA 100%	
200706100	Deschutes Sub-basin Riparian Restoration through USDA Conservation Reserve Enhancement Program (CREP)	Columbia Plateau	2.1	Fund riparian planner to recruit/assist/plan with landowners for riparian protection under CREP program; NRCS authorized/required	BPA 7%	Mixed
200706300	Use of drift nets to monitor production and limiting factors in recruitment of larval Pacific lamprey	Mainstem/Systemwide	2.3	Evaluating larval lamprey via drift nets (McKenzie River); fishery managers, others impacting lamprey authorized/required	BPA 89%	Confirmed
200706400	Protect and Restore Slate Creek	Mountain Snake	1.0	Road decommission/culvert replacement on FS lands; assume covered by BPA-FS MOU	BPA 70%(76)	Mixed
200706500	Coordinate and implement tributary habitat restoration in the Little Salmon River and lower Salmon River Idaho	Mountain Snake	1.0	Addressing impacts of grazing/irrigation on private lands; assuming covered by BOR MOU	BPA 66%	Under Dev.
200706700	Lawyer Creek Idaho A-Run Steelhead Spawning and Rearing Restoration and Enhancement	Mountain Snake	1.0	Addressing impacts of grazing/agriculture on private lands; assume no entity authorized/required to act due to ESA concerns	BPA 90%	Mixed

200706900	Determine status of migratory bull trout in the South Fork Payette River.	Middle Snake	3.0	Basic pop research, fishery managers authorized/required	BPA 100%	
200707000	Fish Passage Facility Final Design and Construction - Clear Lake Dam (NF Tieton R.).	Columbia Plateau	2.2	NonFCRPS dam blockage correction; USBR authorized/required	BPA 68%	Under Dev.
200707200	Flathead Subbasin Flowering Rush and Yellowflag Iris Project	Mountain Columbia	3.0	Invasive weed management, landowners required to address	BPA 100%	
200707300	Dynamics of Gravel Spawning Beds in Lake Pend Oreille, ID	Intermountain	1.0	Research re: effects of Albeni Falls on LPO	BPA 86%	Confirmed
200707700	Hemlock Dam Removal	Columbia Gorge	1.0	Removal of FS dam impacting listed steelhead; FS already authorized/required to remove (see NEPA ROD), but assume covered by MOA	BPA 70% (73)	Under Dev.
200707800	Characterizing the Geographic Distribution of Freshwater Mussels in the Columbia Basin Using Museum Collection Data.	Mainstem/Systemwide	3.0	Freshwater mussel pop analysis, another entity authorized/required (fishery managers)	BPA 100%	
200707900	Salmon & Steelhead Habitat Restoration and Protection in the Yakima Basin	Columbia Plateau	2.3	Multiple restoration activities, multiple other entities may be authorized/required (or cert. that no projects for entities required?)	BPA 88%	Confirmed
200708100	WRIA-Based Restoration Project Feasibility Assessment and Prioritization, Coweeman River	Lower Columbia	3.0	Identifying appropriate offsite habitat improvements, multiple entities may be authorized/required'	BPA 100%	
200708300	Grande Ronde Cooperative Salmonid Monitoring and Evaluation Project	Blue Mountain	2.1	Population/status monitoring; fishery managers authorized/required	BPA 20%	Mixed
200708400	Shrubsteppe Habitat Acquisition for Terrestrial Species in Need of Conservation in the Upper Mid-Columbia Subbasin.	Columbia Cascade	1.0	Wildlife mitigation for FCRPS	BPA 55%	Confirmed
200708500	UPA Nason Creek Oxbow Reconnection Project	Columbia Cascade	1.0	Install arch culverts for oxbow reconnection, mixed private/federal land, assume no entity required to do so	BPA 100%	
200708600	UPA Wenatchee Subbasin Riparian Enhancement Proposal	Columbia Cascade	1.0	Fencing/planting of riparian buffer zones on private land, assume no landowner requirement	BPA 100%	
200708900	Monitoring Invasive Species in the mainstem Columbia River: the development of a design to monitor the status and trends and provide for the early detection of invasive species	Mainstem/Systemwide	3.0	Invasive aquatics species research, multiple entities authorized/required (fish managers, water quality managers; all river users)	BPA 100%	
200709000	Effects of the marine environment on the growth and survival of Columbia Basin spring Chinook and sockeye salmon stocks.	Mainstem/Systemwide	3.0	Ocean research re chinook; multiple entities authorized/required (eg fishery managers)	BPA 100%	
200709100	The evaluation of limiting factors on resident and anadromous salmonids in Lake Wenatchee, Washington	Columbia Cascade	2.3	Assessing limiting factors for recovery, recreational fishery; fishery managers authorized/required	BPA 78%	Confirmed
200709200	Restore Selway River Watershed	Mountain Snake	1.0	Culvert replacements on FS lands; assume covered by BPA-FS MOU	BPA 70% (70)	Mixed
200709300	Restore Middle Fork Clearwater Face Drainages	Mountain Snake	1.0	Culvert replacements, road decommis. on FS lands, also riparian fencing; assume covered by BPA-FS MOU	BPA 70% (77)	Under Dev.
200709400	Protect & Restore Clear Creek Watershed	Mountain Snake	1.0	Culvert replacements, road decommis. on FS lands; assume covered by BPA-FS MOU	BPA 70% (77)	Mixed
200709600	Wildlife Inventory and Habitat Evaluation of Duck Valley Indian Reservation	Middle Snake	2.3	Duck Valley Indian Reservation wildlife inventory, not wildlife mitigation lands; other entity required (tribe, BIA)	BPA 70%	Under Dev.
200709700	Restoring connectivity to a floodplain wetland on Multnomah Channel	Lower Columbia	2.2	Creek restoration, but includes fixes to Metro installed (2002) water control that block passage (Metro authorized/required)	BPA 54%	Confirmed
200709900	Gold Creek (Lakeview District) Bull Trout Habitat and Migration Protection	Intermountain	2.2	Mine restoration, mixed private & FS; assume MOU does not apply; DEQ, EPA authorized/required to address, along with FS	BPA 54%	Confirmed

200710200	Subbasin Scale Monitoring and Plan Implementation Monitoring for the Yakima Subbasin Plan	Columbia Plateau	2.1	Subbasin plan implementation, assume similar to other coordination	BPA 62%	Confirmed
200710300	Skookumchuck Watershed	Columbia Cascade	1.0	Habitat acquisition for fish protection, irrigation/road/grazing mitigation; okay assuming no other entity (eg Grant Co PUD) required to obtain parcel	BPA 100%	
200710400	Protect and Restore White Bird Creek	Mountain Snake	1.0	Culvert replacements, road decommis on FS lands; assume covered by BPA-FS MOU	BPA 70% (70)	Mixed
200710500	Protecting & Restoring the Wallowa River Watershed	Blue Mountain	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 50%	Mixed
200710600	Spokane Tribe Fish and Wildlife Planning and Coordination	Mainstem/Systemwide	2.1	Coordination/travel costs for wildlife managers (wildlife managers authorized/required)	BPA 100%	
200710700	What was old is new again: evaluate the pound net and beach seine as innovative live capture selective harvest gears	Mainstem/Systemwide	2.3	Harvest practices; fishery managers authorized/required	BPA 88%	Under Dev.
200710800	Regional Coordination for Upper Columbia United Tribes	Mainstem/Systemwide	2.1	Regional coordination for UCUT (UCUT entities authorized/required)	BPA 100%	
200710900	Aquatic Nuisance Species monitoring and outreach program for the Mountain Columbia province (Montana portion) of the Columbia River Basin	Mountain Columbia	2.2	Aquatic invasive monitoring, multiple entities authorized/required	BPA 70%	Confirmed
200711000	Differences in Functional Genes Between Hatchery and Wild Chinook Salmon	Mainstem/Systemwide	2.3	Genetic research for hatchery reform efforts; fishery managers authorized/required	BPA 88%	Confirmed
200711100	Assess impacts of flow augmentation on bull trout in the North Fork and Lower Clearwater Rivers	Mountain Snake	1.0	Bull trout impacts, Dworshak flow augmentation	BPA 100%	
200711200	Teanaway Watershed - Protect critical habitat from development, reduce water temperatures and increase instream flows, restore habitat forming processes in the floodplain.	Columbia Plateau	1.0	Riparian conservation easements	BPA 78%	Confirmed
200711300	Cowiche Restoration and Protection Project (Easement/Fee Simple Acquisition)	Columbia Plateau	2.2	Anadromous fish habitat acquisition	BPA 26%	Confirmed
200711400	Vulcan Mountain Weed Control for Mule Deer and Bighorn Sheep Habitat Improvement	Intermountain	3.0	Weed control, wildlife managers/others required to address	BPA 100%	
200711600	Lostine River Watershed Restoration	Blue Mountain	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 43%	Mixed
200711700	Comprehensive Assessment of Coho Salmon Restoration Efforts in the Mid- Columbia and Mid-Snake River Basins	Mainstem/Systemwide	1.0	Fund symposium and other coordination of coho reintroduction	BPA 70%	Under Rev.
200711800	Protect and Restore Anadromous Fish Habitat in Little Naches River Watershed.	Columbia Plateau	1.0	Purchase checkerboard lands for Forest Service, Little Naches watershed, assume covered by FS MOU	BPA 70% (90)	Under Dev.
200711900	Restore Access to Upper Musselshell Creek	Mountain Snake	1.0	Channel realignment on FS lands after blockage by historic mining tunnel; FS is authorized/required; assume covered by MOU	BPA 70%(77)	Under Dev.
200712000	Malheur Subbasin Habitat Restoration and Fish Enhancement – Logan Valley Project	Middle Snake	3.0	Logan Valley/Stanbro Ranch acquisition, mitigation for nonFCRPS dam (Warm Springs) and blockage by Hells Canyon complex, other entities authorized if not required (Idaho Power, Reclamation, irrigation districts). Resolution if cost share from one or more of these entities of reasonable level. Alternatively, could be acquired for wildlife mitigation, if regional parties place priority on it and accept it for mitigation of Middle Snake or other FCRPS projects (Lower Snake wildlife mitigation already accomplished).	BPA 100%	

200712200	White Salmon River watershed assessment above and below Condit Dam before anadromous fish reintroduction.	Columbia Gorge	2.3	Post Condit dam removal reintroduction assessment; other entities authorized or required (fishery managers; Condit dam owners)	BPA 79%	Mixed
200712400	Okanogan County Irrigation Water Management Improvement Project	Columbia Cascade	1.0	Upgrade irrigation systems for efficiency; assuming no order/requirement to do so	BPA 95%	Confirmed
200712500	Protect and Restore the Tucannon River Watershed - Nez Perce Tribe	Columbia Plateau	1.0	Road decommission/culvert replacement on FS lands; assume BPA-FS MOU applies	BPA 70% (79)	Mixed
200712600	Protect and Restore the Lower Snake Tributary and Pataha Streams/Watersheds - Nez Perce Tribe	Columbia Plateau	2.3	Culvert/barrier inventory on mixed ownership lands; multiple entities may be authorized/required to address	BPA 95%	Confirmed
200712700	Reestablish Connectivity and Restore Fish Habitat in the East Fork of the South Fork Salmon River Watershed	Mountain Snake	1.0	Reestablish passage through falls, on FS lands; assume covered by BPA-FS MOU	BPA 70%(58)	Mixed
200712800	Protect and Restore the Little Salmon Watershed	Mountain Snake	1.0	Culvert removal, fencing on FS lands; assume covered by BPA-FS MOU	BPA 70% (85)	Mixed
200713100	Screening diversions for conservation of fish populations in the Columbia River Basin: entrainment losses, prioritization, and the efficacy of alternative technology designs	Mainstem/Systemwide	2.3	Impacts of unscreened diversions study and design suggestions; others authorized/required (fishery managers/state water departments, irrigators)	BPA 92%	Confirmed
200713200	NEOH Monitoring & Evaluation Implementation (Formerly a component of 198805301)	Blue Mountain	1.0	Hatchery M&E although fishery managers authorized/required, assume FCRPS obligation here since FCRPS hatchery	BPA 73%	Mixed
200713300	Systemwide distribution of genetic variation within and among populations of the white sturgeon (Acipenser transmontanus)	Mainstem/Systemwide	2.3	White sturgeon genetic research; fishery agencies, other actors authorized/required	BPA 97%	Confirmed
200713400	Restore and Protect Crooked River Watershed	Mountain Snake	1.0	Culvert replacements, road decommis on FS lands; assume covered by BPA-FS MOU	BPA 70% (62)	Mixed
200713500	Lower Columbia Salmon Recovery Planning: Habitat Restoration Project List Development and Modeling	Lower Columbia	2.3	Recovery prioritization/planning; multiple entities authorized/require (fishery managers, other actors in recovery)	BPA 95%	Confirmed
200713600	Beavers as stream restorations? Determining Systemwide status and trends in beaver impoundments in tributary streams, and the relationships between beaver impoundment and salmonids.	Mainstem/Systemwide	2.3	Beaver research, impacts on salmonid, stream restoration; fish/wildlife managers authorized/required	BPA 87%	Confirmed
200713700	Open Channels	Upper Snake	2.2	Multiple restoration activities; multiple other entities potentially authorized/required	BPA 65%	Under Dev.
200713900	Rock Creek Stabilization and Habitat Rehabilitation	Columbia Gorge	1.0	LWD etc to improve pool/riffle habitat; assume no other entity required to perform	BPA 85%	Mixed
200714100	Bull Trout Effective Population Size in Isolated Populations	Blue Mountain	2.3	Bull trout viability research; fishery managers authorized/required	BPA 88%	Confirmed
200714200	Restore and Protect American River Watershed	Mountain Snake	1.0	Culvert replace, trib restoration, weed control on FS lands; assume covered by BPA-FS MOU	BPA 70% (80)	Mixed
200714400	Evaluation of water temperature exposure in the Columbia River hydrosystem on reproductive success of adult and juvenile Chinook salmon and steelhead	Mainstem/Systemwide	1.0	FCRPS temp evaluation	BPA 5%	Confirmed
200714500	Okanogan Livestock and Water	Columbia Cascade	1.0	Livestock mitigation (watering sites, fencing)"allowing producers to respond to and prevent complaints;" other entities authorized/required (livestock owners)	BPA 100%	

200714600	Bull Trout Population Status Monitoring in the Snake River Basin of Southeast Washington	Columbia Plateau	2.3	Population status monitoring for bull trout; fishery managers authorized/required	BPA 89%	Mixed
200714700	Willamette Flow Management Project	Lower Columbia	2.2	Flow management evaluation on Willamette; other hydro operators authorized/required	BPA 65%	Confirmed
200714800	Monitoring and Models for Restoration and Adaptive Management of White Sturgeon in the Columbia River Basin	Mainstem/Systemwide	2.3	White sturgeon monitoring, fishery managers, others authorized/required	BPA 79%	Under Dev.
200714900	Pend Oreille Nonnative Fish Suppression Project	Intermountain	2.3	Non-native fish suppression, fishery managers authorized/required	BPA 99%	Confirmed
200715000	Expand Salmonid Monitoring in Grays River to Meet Monitoring Needs Identified in the Lower Columbia Salmon Recovery and Subbasin Plan and maintain an at risk Chum Salmon Pop. through Supplementation.	Columbia Estuary	2.2	Population status monitoring for recovery; fishery managers, others authorized/required	BPA 38%	Confirmed
200715100	Nutrient Enhancement Business Plan	Mainstem/Systemwide	2.3	Develop business plan to address use of hatchery carcasses as nutrient analog; fishery managers authorized/required	BPA 91%	Confirmed
200715300	Cardwell Hills Wildlife Mitigation and regional Biodiversity Protection Project	Lower Columbia	1.0	Wildlife mitigation (but need to confirm FCRPS mitigation species/habitats being acquired & that BPA receiving habitat unit credits, not clear from proposal)-if mitigation authorized/required from other entities, this would be rated a 2.3.	BPA 99.7%	Confirmed
200715400	Douglas County Multi Species Habitat Conservation Plan, Previously referred to as the Foster Creek Habitat Conservation Plan (FCHCP)	Columbia Cascade	3.0	County HCP implementation (agriculture, timber); other entities authorized/required to implement	BPA 100%	
200715500	Develop a Master Plan for a Rearing Facility to Enhance Selected Populations of White Sturgeon in the Columbia River Basin	Mainstem/Systemwide	1.0	White sturgeon hatchery planning; although other entities authorized/required (fishery managers, other dam operators etc), assume okay because will clearly mitigate for FCRPS	BPA 100%	
200715600	Rock Creek Fish and Habitat Assessment for the Prioritization of Restoration and Protection.	Columbia Plateau	2.3	Population monitoring primarily; fishery managers authorized/required	BPA 82%	Confirmed
200715700	Bull Trout Status and Abundance Monitoring in the Waters in and Bordering the Warm Springs Reservation, Oregon	Columbia Plateau	2.3	Bull trout monitoring, lower Deschutes; other entities authorized required (fishery managers; Pelton Round Butte operators)	BPA 84%	Mixed
200716000	Evaluation of spawning success in Pacific salmon using electromyogram telemetry	Mainstem/Systemwide	2.3	Sockeye salmon spawning success study; fishery managers authorized/required	BPA 89%	Under Dev.
200716200	Kalispel Tribe Fish and Wildlife Coordination	Mainstem/Systemwide	2.1	Coordination/travel costs for wildlife managers	BPA 100%	
200716400	Determination of Steelhead Production and Productivity Response to Habitat Manipulations in the Upper Potlatch River, Idaho	Mountain Snake	3.0	Report on steelhead production in Potlatch River, other entities (fishery managers) authorized/required	BPA 100%	
200716500	Relative abundance, distribution, and population structure of lampreys in the Columbia River Basin	Mainstem/Systemwide	3.0	Lamprey population analysis, fishery managers authorized/required	BPA 100%	
200716600	Lower Columbia River Coastal Cutthroat Trout Population Response to Habitat Restoration	Columbia Estuary	2.3	Coast cutthroat trout response to habitat restoration, via PIT tag study; multiple entities authorized/required (fishery managers requiring habitat restoration; & all entities doing restoration activity)	BPA 86%	Confirmed
200716800	Using otolith microstructure and microchemistry to delineate growth patterns and spatial structure of Snake River Fall Chinook salmon	Mainstem/Systemwide	3.0	Snake River Fall Chinook basic biology research; other entities authorized/required (eg fishery managers)	BPA 100%	

200716900	Total Dissolved Gas Effects on Incubating Chum Salmon Below Bonneville Dam	Lower Columbia	1.0	BON TDG	BPA 100%	
200717000	South Fork Snake River Yellowstone cutthroat trout recruitment and survival improvement	Upper Snake	2.3	Screening of irrigation, and updating fish management weirs; other entities authorized/required (irrigators for screens, IDFG for weirs)	BPA 96%	Confirmed
200717100	Malheur River Subbasin Habitat Restoration and Fish Enhancement–Stinkingwater Project	Middle Snake	3.0	Habitat to address fish/wildlife losses, but not related to FCRPS dam (Warm Springs dam), grazing; another entity authorized/required to address (eg non FCRPS, livestock owners, range managers)	BPA 100%	
200717200	UPA Project - MVID West Canal Diversion and Headworks	Columbia Cascade	2.2	Irrigation infrastructure improvements to allow for canal use after required diversion reductions; irrigation district assumed to be authorized, if not required to conduct this work already	BPA 50%	Mixed
200717300	Upper South Fork McKenzie Channel Restoration	Lower Columbia	1.0	Channel restoration on FS lands; assume BPA-FS MOU covers	BPA 70%(71)	Confirmed
200717500	DNA typing to identify native inland Oncorhynchus mykiss	Mainstem/Systemwide	2.3	DNA research, fishery managers authorized/required	BPA 93%	Under Rev.
200717600	A Freshwater Mussel Watch for Biomonitoring in the Columbia River Basin	Mainstem/Systemwide	3.0	Research re: mussels as indicator species, other entities authorized/required (eg fish/wildlife agencies, other hydro owners etc)	BPA 100%	
200717700	Protecting wild steelhead populations by minimizing the behavioral differences between hatchery and wild populations.	Mainstem/Systemwide	2.3	Behavior research, wild vs hatchery steelhead; fishery managers authorized/required	BPA 79%	Confirmed
200717800	Monitoring fine sediment delivery in the Entiat subbasin	Columbia Cascade	1.0	Develop/test protocols for evaluating fine sediment delivery; assume covered by MOU	BPA 70% (75)	Mixed
200718000	Evaluating and prioritizing restoration of riparian habitat for improving in-stream conditions for anadromous salmonids in the Columbia River basin.	Mainstem/Systemwide	1.0	Aquatic/riparian model development, assume covered by MOU	BPA 70%(93)	Confirmed
200718100	Lower Lawyer Creek Stream Restoration Project	Mountain Snake	1.0	Restoring channel meander on private land; assume no ESA or other requirement to do so	BPA 90%	Confirmed
200718300	Restoration of Historical Salmonid Habitat in South West Idaho	Multiprovince	1.0	Culvert removal on FS lands; assume BPA-FS MOU covers?	BPA 70%(65)	Mixed
200718600	Middle Fork Willamette River Bull Trout Passage and Habitat Restoration	Lower Columbia	1.0	Replacing FS road culvert, assume BPA-FS MOU covers	BPA 70%(49)	Mixed
200718700	Use of Mainstem Habitats by Juvenile Pacific Lamprey (Lampetra tridentata)	Mainstem/Systemwide	3.0	Lamprey research, mainstem, other entities authorized/required (eg other hydro)	BPA 100%	
200718800	Lower Willamette River Fish Passage and Floodplain Reconnection at Oaks Bottom Wildlife Refuge	Lower Columbia	2.2	Replace culvert in Oaks Bottom Wildlife Refuge; assume neither City nor Corps already required to do	BPA 52%	Mixed
200719000	Icicle Creek Ecological Recovery and Fish Population Monitoring	Columbia Cascade	2.2	Population monitoring of recently restored stream segment; fishery managers others authorized/required	BPA 69%	Mixed
200719300	Evaluate potential to enhance spawning of summer/fall chinook salmon in the tailrace of Chief Joseph Dam, Columbia River, WA	Columbia Cascade	1.0	FCRPS tailrace spawning	BPA 100%	
200719400	Oak Flats Acquisition and Habitat Enhancement	Columbia Plateau	1.0	Anadromous fish habitat acquisition (addressing irrigation impacts/Wapatox etc)	BPA 86%	Mixed
200719700	Evaluating the sublethal impacts of current use pesticides on the environmental health of salmonids in the Columbia River Basin.	Mainstem/Systemwide	3.0	Pesticide impacts, other entities authorized/required (eg EPA, NMFS; state DEQs, agricultural users, etc)	BPA 100%	
200719800	Next Steps in Subbasin Planning: Umatilla Pilot Project	Columbia Plateau	3.0	Subbasin plan implementation, multiple entities authorized/required	BPA 100%	

200720000		Idaho Subbasin Planning and Comprehensive Wildlife Conservation Strategy (CWCS) Data Distribution System	Mainstem/Systemwide	2.1	Web-based data distribution for ID subbasin plan implementation; assume similar to other coordination proposals	BPA 46%	Confirmed
200721000	1	Mores Creek Watershed Floodplain and Habitat Restoration: Design and Implementation	Middle Snake	2.3	Mitigating non FCRPS dam (?); also mining impacts; other entities authorized/required (eg, Reclamation, FS). Note: rating changed from a "3" to a "2.3" due to cost share identification between time of preliminary and final in lieu evaluation.	BPA 70%	
200721200		Develop a locally-adapted summer steelhead program to supplement natural production throughout the Okanogan River basin	Columbia Cascade	1.0	Evaluate expansion of Cassimer Bar hatchery for steelhead supplementation; assume in mitigation for FCRPS	BPA 85%	Under Rev.
200721300		Assessing Recruitment Failure Across White Sturgeon Populations: Differences in Prey Availability and Physical Habitat Among Areas with Consistent, Inconsistent, and no Annual Recruitment to Age-1	Mainstem/Systemwide	2.3	Investigate causes of sturgeon recruitment failure; multiple entities authorized/required (fishery managers, other Hs impacting sturgeon)	BPA 77%	Confirmed
200721400		UPA Project - Fender Mill Floodplain Restoration - Phase 1	Columbia Cascade	1.0	Reconnect floodplain via dike removal etc; assume no entity already required to do	BPA 67%	Confirmed
200721500		Adult Steelhead Monitoring in Trout Creek	Columbia Gorge	3.0	Population monitoring, other entities authorized/required (eg WDFW)	BPA 100%	
200721600		Pacific Northwest Aquatic Monitoring Partnership-Fish Population Monitoring (FPM)RME Design and Protocols. Programmatic and Standardized Work Products for PNW and the Columbia Basin	Mainstem/Systemwide	2.2	Multiple entity monitoring program	BPA 43%	Mixed
200721700		Operation and Maintenance for Walla Walla Basin Passage Projects	Columbia Plateau	1.0	O&M on BPA-constructed screens; assume BPA has already agreed to fund	BPA 100%	
200721800		Development of single nucleotide polymorphism (SNPs) genetic markers diagnostic between coastal rainbow trout and interior redband trout	Mountain Columbia	3.0	Fish diagnostics/biology research, other entities authorized/required (fishery managers)	BPA 100%	
200721900		Clackamas Watershed Prioritized Fish Passage Barrier Removal	Lower Columbia	1.0	Removal of road crossing barrier on private land; assume landowner not already required to address due to impacts to listed species	BPA 88%	Mixed
200722000		Water and Economic Optimization Project to Restore Streamflow in Fifteenmile Creek in the Fifteenmile Sub-basin.	Columbia Gorge	1.0	Testing new approach to withdrawals for irrigation (assuming no order, consent decree etc requiring increased flows here)	BPA 96%	Mixed
200722100		Native Trout Restoration in the Methow, Entiat, and Wenatchee Subbasins	Columbia Cascade	3.0	Trout restoration via investigation & invasives management; WDFW authorized/required	BPA 100%	
200722300		Genetic characteristics and movement patterns of bull trout populations between Chief Joseph and McNary Dams, within the Columbia Cascade and Columbia Plateau Provinces	Multiprovince	2.2	Population/genetics studies; fishery managers, other hydro ops authorized/required	BPA 60%	Confirmed
200722400		Implementation of the Okanogan Subbasin Plan. Initiate a Programmatic and Sequenced set of Key Habitat Restoration and Protection Actions	Columbia Cascade	2.3	Multiple restoration activities, multiple other entities may be authorized/required	BPA 90%	Mixed
200722700		Rapid DNA Profiling of Hatchery and Wild Salmon Stocks with Single Nucleotide Polymorphism (SNP) Profiling	Mainstem/Systemwide	3.0	DNA profiling, fishery managers authorized/required	BPA 100%	

200722900		Development of protocols and priorities for re establishing naturally reproducing populations of Upper Willamette River Chinook Salmon above US Army Corps of Engineers dams in the Willamette Subbasin	Lower Columbia	1.0	FCRPS Willamette mitigation (re-population above blockages)	BPA 66%	Mixed
200723000		Selective Gear Demonstration Project: Reef Net Fishing Gear for Lower Columbia River Commercial Salmon Fishery	Mainstem/Systemwide	3.0	Reefnet fishing gear testing (fishery managers authorized/required)	BPA 100%	
200723100		UPA Entiat Subbasin Riparian Enhancement Program	Columbia Cascade	2.3	Fencing, livestock management to protect listed species, mixed landownership; other entities authorized/required (FS, pvt, to avoid ESA impacts)	BPA 92%	Confirmed
200723200		Okanogan-Similkameen Habitat Protection Project - Fish and wildlife habitat protection through fee simple and conservation easement purchases.	Columbia Cascade	1.0	Assuming wildlife HUs to be obtained	BPA 100%	
200723300	√	Distribution and Abundance Monitoring of Oncorhynchus mykiss within the Lower Clearwater Subbasin	Mountain Snake	2.3	Population analysis for listed species, multiple entities authorized/required (fisheries managers, NMFS, entities with impacts to listed species). Note: rating changed from a "3" to a "2.3" due to cost share identification by sponsor between time of preliminary and final in lieu evaluation.	BPA 96%	
200723400		Assessing Habitat and Environmental Suitability for Northern Leopard Frogs in the Crab Creek and Pend O'reille Sub-basins of Eastern Washington	Columbia Plateau	3.0	RME re: declining leopard frogs in WA; multiple entities authorized/required (WDFW, other sources of habitat decline)	BPA 100%	
200723500		Proposal to Create a Sub-Basin Plan for the Blackfoot River Sub-Basin	Mountain Columbia	1.0	(Because we funded development of other sub-basin plans)	BPA 83%	Confirmed
200723600		Strategic Adaptation of the Federal Columbia River Power System to Climate Variability and Change	Mainstem/Systemwide	1.0	FCRPS response to climate change (models & remote sensing)	BPA 96%	Confirmed
200723700		UPA Project - Elbow Coulee Floodplain Restoration	Columbia Cascade	1.0	Dike removal, LWD install, assume no entity already required	BPA 57%	Confirmed
200723800		Providing Services to Assist Record Keeping of Over the Bank Sales in Zone 6 Tribal Fisheries	Multiprovince	3.0	Record keeping for harvest sales; other entities authorized/required (harvest managers)	BPA 100%	
200724100		Well modifications to improve aquatic habitat for Toppenish/Simcoe Creeks.	Columbia Plateau	3.0	Well modifications to help groundwater; other entities authorized/required (well owners, state etc) [could check not required to do so]	BPA 100%	
200724200		Fifteenmile Subbasin Efficient Irrigation Technology	Columbia Gorge	1.0	Upgrade irrigation systems for efficiency; assume no order/requirement to do so	BPA 72%	Mixed
200724300		Crab Creek Subbasin Plan 2007	Columbia Plateau	1.0	Subbasin plan fix it	BPA 100%	
200724500		Protect and Restore the Joseph Creek Watershed	Blue Mountain	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 40%	Mixed
200724600		Restoration of bull trout passage at Albeni Falls Dam using a trap-and-haul approach in conjunction with investigations to assess effectiveness of rapid genetic analysis in assigning natal tributary	Intermountain	1.0	Albeni Falls & bull trout	BPA 100%	
200724700		Priscilla Peak Wildlife Habitat Restoration (Prescribed Fire)	Mountain Columbia	1.0	Prescribed fire, wildlife in MT assume covered by MOU	BPA 70%(82)	Mixed
200724900		Evaluation of Live Capture, Selective Fishing Gear	Mainstem/Systemwide	2.3	Testing selective fishing gear, fishery managers authorized/required	BPA 98%	Confirmed
200725000		Genetic Evaluation of Chinook Salmon Supplementation in Idaho Rivers	Mountain Snake	3.0	Hatchery supplementation analysis in ID; other entities authorized/required (eg fishery managers, hatchery managers)	BPA 100%	
200725100		UPA Project - Methow Valley Irrigation District East Diversion Dam Replacement	Columbia Cascade	2.2	Replace existing infrastructure to meet fish passage standards; irrigation district authorized/required to do	BPA 41%	Mixed

	Multi-scale assessment of hyporheic flow,					
200725200	temperature and fish distribution in Columbia River Tributaries	Mainstem/Systemwide	2.2	Floodplain/water temp study/interactions; multiple entities authorized/required (fishery managers, DEQs, other hydro operators, etc).	BPA 34%	Confirmed
200725300	Monitoring of Adult Abundance and Spatial Distribution for Snake River Spring/Summer Chinook Salmon ESU Populations	Mainstem/Systemwide	3.0	Monitoring adult chinook/ESA abundance; other entities authorized/required (fisheries managers, NMFS, others affecting chinook).	BPA 100%	
200725400	StreamNet Support and Services for Conservation and Recovery Data Needs	Mainstem/Systemwide	3.0	Fish population inventory coordination with another BPA project; other entities authorized/required (eg fishery managers)	BPA 100%	
200725500	Protect and Restore the Middle Lochsa	Mountain Snake	1.0	Culvert replacement, road decomiss on FS lands; assume covered by BPA-FS MOU?	BPA 70% (90)	Under Rev.
200725600	Physical and Biological Testing of a Flow Velocity Enhancement System	Mainstem/Systemwide	2.3	Flow velocity/enhancement equipment testing; Cowlitz river; other hydro operators authorized/required	BPA 79%	Confirmed
200725700	Protect and Restore the Imnaha Subbasin	Blue Mountain	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 48%	Mixed
200725800	Development of reliable ESU-specific estimates of escapement, harvest, and straying for adult anadromous salmonids migrating through the Federal Columbia River Power System.	Mainstem/Systemwide	2.1	Assume mostly FCRPS related, though fishery managers authorized/required to some degree	BPA 27%	Mixed
200725900	Wilson Creek Relocation and Rehabilitation	Columbia Plateau	1.0	Relocate/rehab creek on campus; assume not required to perform already	BPA 61%	Mixed
200726000	Acquisition of a Conservation Easement over 1084 acres of Upland Prairie and Oak Habitat, Willamette Subbasin	Lower Columbia	1.0	Wildlife HUs; note too fish interests	BPA 53%	Confirmed
200726100	Habitat effectiveness survey of existing, historical, and potential beaver habitat in the Upper Columbia Basin, Methow Subbasin	Columbia Cascade	2.3	Analysis of beaver, WA watershed, to address relocation needs; other entities authorized/required (WDFW, Forest Service)	BPA 80%	Under Dev.
200726200	Enhanced Landscape Classification to Improve Assessment of Conservation Restoration and Mitigation Projects	Mainstem/Systemwide	3.0	General effectiveness evaluation (especially habitat); multiple entities authorized/required	BPA 100%	
200726400	UPA Project - Programmatic Habitat Complexity Projects in the Methow River Subbasin	Columbia Cascade	1.0	Remove dikes, reconnect side channels; assume no existing entity required to conduct	BPA 71%	Under Dev.
200726500	Complete and Coordinate a Subbasin Plan for the Bitterroot Watershed	Mountain Columbia	1.0	(Assuming BPA is responsible for new subbasin plans since it funded the original set)	BPA 100%	
200726700	Probabilistic Monitoring of the Status and Trends of Habitat, Water Quality, and Fish Presence in the Washington Portion of the Columbia River Basin	Mainstem/Systemwide	3.0	Offsite habitat monitoring, using EMAP; multiple other entities authorized/required (WA state, individual landowners etc)	BPA 100%	
200726800	Idaho Watershed Habitat Restoration Project via Custer Soil and Water Conservation District	Mountain Snake	2.2	Multiple restoration activities; multiple other entities potentially authorized/required to conduct	BPA 64%	Mixed
200726900	Clearwater Coho Restoration Project	Mountain Snake	1.0	Hatchery mitigation, Clearwater, coho, mitigating for Dworshak (but also note, non FCRPS dams originally blocked passage)	BPA 100%	
200727000	Lake Rufus Woods Subbasin Area Stock Assessment, Habitat Assessment and Fisheries Evaluation Program	Intermountain	1.0	FCRPS reservoir stock assessment, management issues, assume in mitigation for FCRPS	BPA 100%	
200727100	Willamette Basin Capitalized Wildlife Land Acquisitions	Lower Columbia	1.0	Wildlife HUs, minimum HUs promised (650)	BPA 99%	Confirmed
200727200	Conservation and Recovery of Endangered Species Act Listed Floodplain Fishes in the Willamette Basin, with Emphasis on Oregon Chub	Lower Columbia	2.2	Multiple restoration activities for recovery of chub; multiple entities authorized/required (fishery managers, other entities impacting)	BPA 63%	Mixed

200727300	Evaluate the effects of hyporheic exchange on egg pocket water temperature in Snake River fall Chinook salmon spawning areas	Blue Mountain	3.0	Evaluate benefits of changing discharge operations at Hells Canyon; Idaho Power required	BPA 100%	
200727400	A Proposal to Expand Current Juvenile Salmonid Monitoring in the Lower Columbia Province to Meet the Monitoring Needs Identified in the Lower Columbia Salmon Recovery and Subbasin Plan.	Lower Columbia	2.2	Monitoring for recovery plan implementation; multiple entities authorized/required	BPA 31%	Confirmed
200727500	Impact of American shad in the Columbia River	Mainstem/Systemwide	2.3	Basic research on shad; fishery managers authorized/required	BPA 87%	Confirmed
200727600	Idaho Department of Fish and Game Rearing Expansion for Snake River Sockeye Salmon	Mountain Snake	2.3	Expand sockeye facilities to address limits at both LSRCP and Mitchell Act facilities; need clarity on connection with Mitchell Act hatchery (NMFS authorized/required to address)	BPA 98%	Mixed
200727700	Hamilton Creek Stabilization and Habitat Rehabilitation	Lower Columbia	1.0	LWD installment, for BON2 powerhouse mitigation	BPA 70%	Confirmed
200727900	Assess Stream Habitat for Salmonid Recovery in the Lower Clearwater Subbasin	Mountain Snake	2.3	Stream habitat inventory, Lower Clearwater (mixed ownership, tribal, federal, private); multiple agencies authorized/required to inventory streams	BPA 79%	Mixed
200728000	Columbia River Basin Journal	Mainstem/Systemwide	1.0	No other entity known to be authorized/required to fund	BPA 94%	Confirmed
200728100	Washington Salmonid Abundance and Productivity Monitoring Framework	Mainstem/Systemwide	2.2	Recovery monitoring; fishery managers authorized/required	BPA 52%	Mixed
200728200	Okanogan River Restoration Initiative: Phases IV & V	Columbia Cascade	2.3	Dike setbacks, other river restoration activities on land in Canada (BC agencies authorized/required; also see Mid-Columbia PUD HCP?)	BPA 81%	Under Dev.
200728300	UPA Wenatchee Subbasin Access Proposal	Columbia Cascade	1.0	Channel realignment, LWD etc on private lands	BPA 100%	
200728500	Subyearling chinook salmon use of the Lower Willamette River.	Lower Columbia	2.3	Population research, needed by Portland for ESA compliance	BPA 94%	Confirmed
200728600	Deschutes Cooperative Stream Flow Restoration	Columbia Plateau	1.0	Restoration of streamflows above PRB; instream flow acquisition, irrigation efficiencies	BPA 4%	Mixed
200728700	Delivering Reliable Fish Passage Information for Hydrosystem Management	Mainstem/Systemwide	1.0	FPC (1 rating for all activities in program & mainstem amendment)	BPA 100%	
200728800	Touchet Eastside and Westside Irrigation District Piping	Columbia Plateau	1.0	Piping of diversions, assume irrigators not required to do	BPA 45%	Confirmed
200729100	Developing and Assessing Freshwater Mussel Distribution, Abundance and Life History Survey Methods in the Columbia Basin in Washington.	Columbia Cascade	2.3	Basic freshwater mussel study, WA, other entities authorized/required (WDFW, entities that impact mussels)	BPA 75%	
200729200	EFFECTIVENESS MONITORING OF IN- STREAM HABITAT RESTORATION IN THE LOWER ENTIAT BASIN AT MICROHABITAT AND REACH SCALES	Columbia Cascade	1.0	Effectiveness monitoring of instream restoration, assume covered by MOU	BPA 70% (64)	Under Rev.
200729300	Umatilla River Basin Stream Temperature Monitoring	Columbia Plateau	2.2	Stream temp monitoring relating to recovery/salmonids; fishery managers, land managers, DEQ, others authorized/required	BPA 64%	Mixed
200729400	Control of BKD by Inactivation of the Renibacterium salmoninarum Sortase Enzyme as an Alternative to Antibiotics	Mainstem/Systemwide	3.0	Hatchery disease research, other entities (eg hatchery/fishery managers) authorized/required	BPA 100%	
200729500	Crow Creek BPA Powerline Channel Restoration Project	Mountain Columbia	1.0	Channel reconstruction, assume covered by MOU	BPA 70%(43)	Mixed
200729600	IDL Clearwater Area Fish Passage	Mountain Snake	3.0	Culvert replacement towards meeting state SRBA requirements	BPA 93%	Confirmed
200729700	Effect of Elevated Water Temperature and Gas Supersaturation on Bull Trout Reproduction and Growth.	Mainstem/Systemwide	3.0	Temperature effects on bull trout, other entities authorized/required (eg fishery managers, temperature contributors)	BPA 100%	

200729900	Investigation of the Relative Reproductive Success of Stray Hatchery and Wild Steelhead and the Influence of Hatchery Strays on Natural Productivity in the Deschutes River Subbasin	Columbia Plateau	3.0	Hatchery/stray research in Deschutes; other entities authorized/required (eg ODFW, Pelton-Round Butte)	BPA 100%	
200730000	Fish Passage Technical Services Project	Mainstem/Systemwide	1.0	Technical/analytical support to fishery agencies for regional collaboratives (eg BiOp remand)	BPA 98%	Confirmed
200731100	Acquire Land to Protect Critical Habitat in the Upper Lochsa	Mountain Snake	1.0	Purchase Clearwater NF inholding, assume MOU covers	BPA 70% (97)	Confirmed
200731200	Albeni Falls Dam Operational Loss Assessment of Riparian Ecological Function in the Pend Oreille River Ecosystem	Intermountain	1.0	Loss assessment for operations	BPA 97%	Confirmed
200731300	Expanded Acquisition and Display of Fish (Initially Anadromous Salmonids) Harvest Data in the StreamNet Database	Mainstem/Systemwide	3.0	Harvest data for StreamNet, other entities authorized/required (eg fishery managers)	BPA 100%	
200731400	Regional Consolidation of Habitat Restoration Project Information From Multiple Funding Sources with Dissemination Through the StreamNet Website	Mainstem/Systemwide	3.0	Coordination of habitat restoration data into StreamNet; multiple other entities authorized/required (e.g., other restoration funders)	BPA 100%	
200731500	Camas Slough/Lower Washougal River Realignment	Lower Columbia	3.0	Feasibility study for re-routing Lower Washougal, multiple entities authorized/required (highway, landowners etc)	BPA 100%	
200731600	McKenzie Canyon Irrigation Project	Columbia Plateau	1.0	Convert open canal to pipe, provide instream flows (no apparent order/decree requiring; no BiOp for BOR?)	BPA 58%	Mixed
200731800	Entiat River - UPA - Knapp-Wham Hanan Detwiler Irrigation System Consolidation Project.	Columbia Cascade	1.0	Wells, other irrigation consolidation; assume irrigation entities not already required to do to address passage barriers	BPA 76%	Confirmed
200731900	WRIA-Based Restoration Project Feasibility Assessment and Prioritization, Kalama River	Lower Columbia	3.0	Identifying appropriate offsite habitat improvements, multiple entities may be authorized/required'	BPA 100%	
200732000	Inventory and Assess Fish Passage and Screening Needs in the Willow Creek Watershed	Columbia Plateau	3.0	Inventory of passage barriers in watershed; other entities authorized/required (eg ODFW, landowners etc).	BPA 100%	
200732100	Data Management for System Operations	Mainstem/Systemwide	1.0	FPC (assume all activities are included in program or mainstem amendment)	BPA 84%	Under Dev.
200732200	Ecosystem Economics Model for Willamette Basin Restoration and Conservation	Lower Columbia	3.0	Ecosystem economics modeling, multiple entities authorized/required	BPA 100%	
200732300	Investigate genetic parentage analysis techniques to estimate spawner abundance in ESA-listed steelhead populations	Mountain Snake	3.0	Genetic analysis regarding ESA-listed steelhead; fishery managers authorized/required	BPA 100%	
200732500	UPA Wenatchee Subbasin Complexity Proposal	Columbia Cascade	1.0	Channel realignment, LWD etc on private lands	BPA 100%	
200732600	Monitoring of juvenile and adult salmonid survival through the Federal Columbia River Power System	Mainstem/Systemwide	1.0	FPC (1 rating for all activities in program & mainstem amendment)	BPA 100%	
200732700	Compilation of Location-Specific Hatchery Release Data in Consistent Format Across Agencies by StreamNet	Mainstem/Systemwide	3.0	Hatchery release data coordination; fishery managers authorized/required	BPA 100%	
200733000	Gardena Farms Irrigation District Irrigation Efficiency and Instream Flow Project	Columbia Plateau	1.0	Close piping of irrigation (assuming irrigators not required to do)	BPA 100%	

200733200	1	Mitigation of marine-derived nutrient loss in the Boise-Payette-Weiser subbasin.	Middle Snake	2.3	Marine derived nutrient loss research, other entities authorized/required (other hydro operators; fishery managers etc). Note: rating changed from a "3" to a "2.3" following sponsor-identified cost-share between time of preliminary and final rating.	BPA 88%	
200733300		Timing and survival of PIT tagged juvenile fall Chinook from the Hanford Reach.	Columbia Plateau	2.2	PIT tagging Hanford Reach fall chinook; multiple other entities authorized/required	BPA 56%	Confirmed
200733500		Migration and homing ecology of supplemented and wild spring Chinook salmon.	Columbia Plateau	3.0	Hatchery/supplementation research; fishery managers authorized/required; may be a "1" because this is a BPA-funded facility (Cle Elum)?	BPA 100%	
200733600		Effects of short-term flow fluctuations on salmon migration	Columbia Plateau	1.0	Research of flow fluctuations at Little Goose	BPA 100%	
200733700		Oregon Plan Monitoring of Steelhead Status, Trend, and Habitat in the Grande Ronde River Subbasin.	Blue Mountain	3.0	Steelhead status/trend monitoring, fishery managers authorized/required	BPA 100%	
200734000		A multidisciplinary collaborative approach to aquatic habitat monitoring & evaluation in the Walla Walla Subbasin	Columbia Plateau	2.2	Aquatic monitoring, multiple entities authorized/required	BPA 33%	Mixed
200734200		IDL Maggie Cr. Area Fish Passage Proposal	Mountain Snake	3.0	Culvert removal on IDL lands, IDL authorized/required (SRBA)	BPA 94%	Confirmed
200734300		A Proposal to Expand Current Juvenile Salmonid Monitoring in the Columbia Estuary Province to Meet the Monitoring Needs Identified in the Lower Columbia Salmon Recovery and Subbasin Plan.	Columbia Estuary	2.2	Juvenile monitoring, estuary, recovery focused; other entities authorized/required (fishery managers, other entities impacting listed species)	BPA 34%	Confirmed
200734400		Lower Columbia River Wild Coho DNA Stock Identification Proposal	Lower Columbia	3.0	DNA research wild coho, fishery managers authorized/required	BPA 100%	
200734500		Grande Ronde Coho Restoration	Blue Mountain	1.0	Expand NEOH to address coho production in mitigation for FCRPS	BPA 100%	
200734600		Crims Island Habitat Restoration	Columbia Estuary	1.0	Assess effectiveness of Corps/BPA tidal marsh restoration	BPA 100%	
200734700		IDL Ponderosa Area Fish Passage	Mountain Snake	2.3	Fish barrier removal on non-federal lands, other entities authorized/required (state, landowners etc)	BPA 88%	Confirmed
200734900		Monitoring resident salmonid populations and the aquatic food web in the upper Icicle Creek subbasin of the Wenatchee River basin.	Columbia Cascade	2.3	Tributary salmonid monitoring, fishery managers authorized/required	BPA 71%	Mixed
200735200		Feasibility Study and Implementation of a System-wide Conservation Enforcement Web-Based Data Center	Mainstem/Systemwide	2.3	Conservation law enforcement database, other entities authorized/required (i.e. law enforcement agencies, fish/wildlife regulatory agencies)	BPA 78%	Under Dev.
200735300		Quantitative and effective analysis of Columbia River Chinook salmon (Oncorhynchus tshawytscha) and steelhead (O. mykiss) population viability.	Mainstem/Systemwide	3.0	Population viability analysis, fishery managers authorized/required	BPA 100%	
200735500		Determining the Accuracy of Adult Coho Salmon Population Estimates from a Random, Spatially Balanced design using Area-Under-the-Curve	Lower Columbia	2.1	Coho population research, other entities authorized/required (eg fishery managers)	BPA 12%	Confirmed
200735800		Estimating the detection efficiency of snorkeling for detecting anadromous salmonid parr	Mainstem/Systemwide	2.3	Effectiveness of snorkel surveys, other entities authorized/required (eg fishery managers, other entities that rely on snorkel survey data)	BPA 88%	Confirmed
200735900		Application and enhancement of monitoring protocols for assessing productivity and watershed condition in headwater subcatchments of the John Day subbasin	Columbia Plateau	2.3	Watershed monitoring, multiple entities authorized/required (FS, landowners, state DEQ etc)	BPA 75%	Under Rev.
200736000		Columbia River/Cowlitz River Eulachon Research and Monitoring Plan (ERMP)	Columbia Estuary	2.3	Smelt population analysis, fishery managers authorized/required	BPA 94%	Under Rev.

200736100	IDL St. Joe Area Fish Passage	Mountain Snake	2.3	Fish barrier removal on private lands, other entities authorized/required (landowners)	BPA 85%	Confirmed
200736200	Assessing Fish Passage Through the Icicle Creek Boulder Field Above Leavenworth National Fish Hatchery	Columbia Cascade	2.2	Tributary passage assessment; fishery managers authorized/required	BPA 67%	Under Dev.
200736300	IDL Pend Oreille Area Fish Passage	Intermountain	3.0	Culvert replacement, non-federal lands ID, others authorized/required (i.e, IDL)	BPA 87%	Confirmed
200736400	Determining the effects of load following on reservoir hydraulics and migration behavior of juvenile salmonids.	Mainstem/Systemwide	1.0	Load following effects, Little Goose	BPA 47%	Mixed
200736500	Canyon Creek Culvert Replacements	Columbia Plateau	1.0	Another entity authorized/required (FS roads), assume covered by BPA-FS MOU	BPA 70% (73)	Under Rev.
200736700	Klickitat and Rock Creek Subbasin Habitat Improvement Program	Columbia Gorge	3.0	Offsite habitat improvements/restoration, multiple activities, multiple entities with authority or requirement to fund	BPA 100%	
200736800	Adult Coho Salmon Monitoring Proposal for the Lower Columbia Province.	Lower Columbia	2.2	Population status monitoring, fishery managers authorized/required	BPA 54%	Confirmed
200736900	Protect and Restore the North Fork Clearwater Subbasin	Mountain Snake	1.0	Culvert removal, road improvements on FS and other lands; assume covered by BPA-FS MOU	BPA 70% (76)	Under Rev.
200737000	Methods of Applying Salmon Timing Mechanisms to Wild and Hatchery Fish Management	Columbia Gorge	2.1	Hatchery/wild fish interactions research, fishery managers authorized required, but many connections to FCRPS operations/spill etc	BPA 100%	
200737100	Documentation of food-web linkages in the mainstem Columbia River – towards understanding the role of invasive species and establishing a baseline trophic state	Columbia Gorge	3.0	Impacts of aquatic invasive species; NOAA (eg National Sea Grant) and others authorized/required	BPA 100%	
200737200	Lake Roosevelt White Sturgeon Conservation Hatchery Project	Intermountain	1.0	White sturgeon hatchery planning, assume in mitigation for FCRPS	BPA 100%	
200737300	IDL Priest Lake Fish Passage	Intermountain	3.0	Culvert replacements, non-fed lands (IDL authorized/required via forest practices act, Snake River Basin Adjudication to address)	BPA 88%	Confirmed
200737400	Investigating Juvenile Salmonid Mortality Associated with Lock Flushing	Mainstem/Systemwide	3.0	Navigation impacts, Corps/shippers required/authorized	BPA 100%	
200737500	Does the Decline of Idaho's Sockeye Salmon Correlate with a Mountain Beetle Infestation?	Upper Snake	3.0	Nutrients, focus on affecting timber resource (timber managers authorized/required)	BPA 100%	
200737700	Cooler Temperatures for Federally Controlled Reservoirs	Mainstem/Systemwide	3.0	Temperature control structure at Brownlee (Idaho Power required)	BPA 100%	
200737800	Investigating Reservoir Sediment Concerns of a Restored Free-Flowing Lower Snake River	Mainstem/Systemwide	3.0	Evaluation of sediment were 4 lower snake dams removed (Corps, Reclamation authorized/required)	BPA 100%	
200737900	Surveying Jobs that Depend on the Existence of Lower Snake River Reservoirs	Mainstem/Systemwide	3.0	Economic impacts of breaching 4 lower snake dams (Corps/others authorized/required and already evaluated)	BPA 100%	
200738000	Keeping Irrigators Whole in the Event of Reservoir Removal	Mainstem/Systemwide	3.0	Impacts to irrigators of removal (irrigators, plus Corps/Reclamation authorized/required)	BPA 100%	
200738100	Lower Columbia Fish Enhancement Group Community-Based Multi-Sub-Basin Habitat Restoration Program	Columbia Estuary	1.0	Hire 3 project managers to facilitate suite of habitat actions; assume that mostly private & that projects where landowner required to undertake activity will be excluded	BPA 9%	Mixed
200738300	Keeping Commodity Shippers Whole in the Event of Reservoir Removal	Mainstem/Systemwide	3.0	impacts to shippers of removal (shippers, plus Corps/Reclamation authorized/required)	BPA 100%	
200738400	Reducing the Cost of Reservoir Removal	Mainstem/Systemwide	3.0	Funding student competition (schools authorized/required)	BPA 100%	
200738500	Investigating Flood Control Benefits and Flooding Risks of Federally Controlled Lower Snake Dams	Mainstem/Systemwide	3.0	Flood control issues (Corps authorized/required)	BPA 100%	

200738600	Estimating Bonneville Power Administration Revenue Effects in the Event of Reservoir Removal	3.0	Revenue impacts of no reservoirs	BPA 100%	
200738800	Fish Passage Data System (Key Functions Previously Performed by the Fish Passage Center)	1.0	FPC (assume all activities are included in program or mainstem amendment)	BPA 100%	