

RPA Description	NMFS's Appendix F 2003 Check-In Criteria and Comments	NMFS Rating:*	Project or Proposal #	Project Name	Estimated FY03 Accrual as of 1/18/03**
		* 1 = Non-discretionary; 2 = Strongly Advised; 3 = May Contribute To Implementing The RPA 4 = Does Not Contribute To Implementing The RPA - = Not Rated			**Accrual estimates are still under review and vendor comments have not yet been incorporated in these numbers. Accrual amounts for new proposals are generally estimated at 1/2 of the proposed budget for the first fiscal year of the proposal.

Hydro Projects	50	Install adult PIT detectors as necessary to evaluate McNary transportation.	Adult PIT tag detectors installed?	1	199008000	PTAGIS	\$ 3,062,636.00
				1	200100300	Installation of Adult PIT Detectors	\$ 2,014,849.00
	100	Implement and study methods to reduce fish predation by Northern Pikeminnow, etc..	Program updated?	1	199007700	Northern Pikeminnow Management	\$ 2,457,969.00
	102	Study avian predation and then if warranted develop and implement measures to reduce avian predator	Actions being implemented?	1	199702400	Avian Predation	\$ 520,871.00
	103	Quantify the extent of predation by white pelicans on juvenile salmon in McNary pool and tailrace	Study plan by 2001? [Study plan was completed and now must be implemented]	1	199702400	Avian Predation (RME only)	\$ already counted
	131	Monitor the effects of TDG	Implemented as annual operation?	1	199602100	Gas bubble disease research and monitoring of juvenile	\$ 46,000.00
	143	Plan a Snake River temperature model and data collection strategy to evaluate the effects of operations.	Water temperature model complete?	1	200202700	Lower Snake Hydrodynamics and Water Quality	\$ 220,392.00

Habitat Projects	149	Address subbasin passage, screening, and flow problems in Priority Subbasins.	Nine basins under implementation? [NOAA Fisheries interprets this action to mean on-the-ground implementation of projects capable of yielding salmonid survival benefits distributed at least across nine priority subbasins jointly between the USBR, BPA, and the COE.]	3	199306200	Custer Soil & Water Conservation District Salmon River Fish Passage Enhancement	\$ 62,308.00
				3	199401500	Idaho Fish Screen Improvement	\$ 753,000.00
				3	199401700	Idaho Model Watershed Habitat Improvement Project	\$ 109,929.00
				3	199600700	Upper Salmon River Diversion Consolidation Program	\$ 110,805.00
				3	199705100	Yakama Nation Yakima/Klickitat Fisheries Project (YKFP) Yakima Side Channels	\$ 587,189.00
				3	199803400	Yakama Nation Yakima/Klickitat Fisheries Project (YKFP) Reestablish Safe Access into Tributaries of the Yakima Subbasin	\$ 888,029.00
	150	Protect currently productive non-Federal habitat. Develop plan and start implementing by '03.	Priorities set and implementation underway?	3	30011	Preserve and Restore Columbia River Estuary Islands to Enhance Juvenile Salmonid and Columbian White-tailed Deer Habitat.	\$ 292,736.50
				3	199802200	Pine Creek Ranch Acquisition	\$ 117,250.00
				3	200001500	Oxbow Ranch Acquisition	\$ 200,000.00
	151	Experiment with innovative ways to increase tributary flows, ie establish a water brokerage.	Experiments with innovative ways to increase tributary flows underway and on track for producing an evaluation report in 2005?	1	200201301	Water Entity (A portion of funding came from PBL via High Priority, but some F&W program funds are necessary.)	\$ 700,000.00

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Habitat Projects	153 Negotiate and fund long-term protection for 100 miles of riparian buffers per year.	Meeting Goal? [It is expected that a two-tier approach will initially be necessary to leverage agricultural incentive programs to fund long-term protection for riparian buffers. Tier 1 will be a continued effort to develop and implement a program for establishing long-term protection for lands enrolled in these programs. Tier 2 consists of continued support of CREP implementation and other similar federal programs as needed to develop, refine, implement and support the long-term protection program. To this end, BPA, working with NOAA Fisheries, FSA, NRCS, the States, and others, will collaboratively develop and implement a multi-agency program to strengthen the CREP in areas within the range of listed fish species. The objective of this multi-agency program is to ultimately achieve long-term or permanent protection of 100 miles of riparian habitat per year. NOAA and BPA will annually evaluate the implementation of the multi-agency program and conclude whether and how the program could be adjusted for more effective implementation. Projects ranked "2" best meld strategy 1 and 2 by incorporating strong components of dedicated infrastructure and public and multi-agency outreach. The goal of this action is 300 miles enrolled in long term or permanent CREP easements. If that goal can't be reached there need to be some number of projects implemented that directly address the issues responsible for impeding this goal. Projects ranked 2 are necessary because they directly address multiple CREP easements and contain strong interagency coordination and outreach elements designed to further achievement of long-term and permanent easements. Proposals ranked 3 do not address all of these elements significantly.]	3	199202601	GRMWP - Eisminger/CREP Dike Relocation (BiOp critical accrual estimate is for only 5 of 37 contracts within this project. The full project accrual estimate is \$1,136,033.)	\$ 1,136,033.00
			3	199304000	Fifteenmile Creek Habitat Restoration Project	\$ 189,600.00
			3	199705600	Lower Klickitat Riparian and In-Channel Habitat Enhancement Project	\$ 298,060.00
			3	199802800	Trout Creek Watershed Improvement Project	\$ 126,266.00
			3	199803300	Restore Upper Toppenish Watershed	\$ 199,075.00
			2	199401805	Asotin Watershed Project Implementation	\$ 79,161.00
			3	199900200	Asotin Watershed Project Implementation	\$ 78,996.00
			3	199900600	Asotin County Conservation District Watershed Upland	\$177,374.00
			3	199901000	Mitigate Effects of Erosion on Salmonid Habitat - Pine Hollow	\$ 22,727.00
			3	200005300	Asotin Creek Riparian Planting	\$ 68,856.00
			3	200005400	Asotin Creek Riparian Fence	\$ 31,414.00
			3	200006400	Conservation Reserve Enhancement Program Incentive	\$ 12,144.00
			3	200006700	Asotin Creek Channel, Floodplain and Riparian Restoration	\$ 82,837.00
			2	200102100	Fifteenmile Creek Riparian Buffers - Wasco County	\$ 77,884.00
			3	200201500	Provide Coordination and Technical Assistance to Watershed Councils and Individuals in Sherman County, Oregon	\$ 65,770.00
			2	200201900	Establish Riparian Buffer Systems	\$ 67,218.00
			2	200202600	Morrow County Buffer Initiative	\$ 77,337.00
			2	200203400	Wheeler SWCD Riparian Buffer Planning and Implementation	\$ 38,668.00
			2	200203500	Gilliam SWCD Riparian Buffers	\$ 77,337.00
			2	27001 (200205000)	Asotin County Riparian Buffer and Couase and Tenmile Creeks Protection	\$ 120,500.00
	154 Ensure development of subbasin planning, including priority subbasin plans by 2003.	Priority basins complete, remainder on track for completion by 2006?	1	200205100	Subbasin Planning, Statewide/Provincial/Tribal Level Note: Estimated accrual amount has been revised to reflect agreement with NPPC. This amount does not match the \$7,576,500 shown in the accrual database.	\$ 4,300,000.00
	155 Develop a mainstem habitat program to identify rm&e needs and develop improvement plans by 2003. Then implement the plan.	Identification of mainstem habitat sampling reaches, survey conditions, cause-and-effect relationships, research plans, and improvement plans for all mainstem reaches complete? [Projects ranked 2 under this action are directed at the 3 year check in criteria of completing the evaluation of mainstem habitat reaches and completing the improvement plans. NOAA interprets Project 35007 to mean that it shall complete a program to 1) identify mainstem habitat sampling reaches, survey conditions, describe cause and-effect relationships, and identify research needs; and 2) develop improvement plans for all mainstem reaches by the 3 year check-in, and therefore gives it a 2 rating. Projects listed as 3's under this Action could support this project.]	2	35007	Evaluate Restoration Potential of Snake River Fall Chinook Salmon Spawning Habitat	\$ 157,500.00
3			199900301	EVALUATION OF SPAWNING OF FALL CHINOOK & CHUM SALMON	\$ 207,949.00	
3			199902500	Sandy River Delta Restoration	\$ 155,562.00	
3			200001200	Evaluate Factors Limiting Columbia River Gorge Chum Salmon Populations	\$ 255,211.00	

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Habitat Projects	156 Study the feasibility of improving chum habitat in the Ives Island area.	Feasibility study complete? [Projects ranked 2 support the COE's critical ongoing feasibility study. Collectively these projects implement annual chum spawning ground counts on both sides of the river below the Dalles Dam, habitat surveys in the same reach (including finding areas with spring seeps or groundwater/surface water interactions), and effects of streamflow and tides on spawning habitat that must be started before 9/2003, and need to continue beyond FY03 as part of the feasibility work for multiple restoration projects. Additionally, they are needed to start evaluating habitat parameters associated with chum spawning success (monitor intergravel water quality near redds at egg pocket depth using piezometers, install redd caps in Hamilton Springs and Hardy Creek to determine swim-up timing and temperature unit requirements for egg incubation) by 9/2003 (and they have). Work also needs to continue beyond FY03 at these sites, and to begin at others where habitat/access is restored.]	2	199900301	EVALUATION OF SPAWNING OF FALL CHINOOK & CHUM SALMON	\$ already counted	
			2	200001200	Evaluate Factors Limiting Columbia River Gorge Chum Salmon Populations	\$ already counted	
			2	200105300	Re-Introduction of Lower Columbia River Chum Salmon into Duncan Creek	\$ 381,671.00	
	157 Improve and restore chum habitat between The Dalles and the mouth of the Columbia.	Restoration efforts identified, funding and implementation initiated? [Projects ranked 1 implement annual chum spawning ground counts on both sides of the river below the Dalles Dam, habitat surveys in the same reach (including finding areas with spring seeps or groundwater/surface water interactions), and effects of streamflow and tides on spawning habitat. These projects must be started before 9/2003, and needs to continue beyond FY03 as part of the feasibility work for identifying, funding and implementing multiple restoration projects. Projects ranked 2 identify current restoration opportunities which could be funded and underway by the 3-year check-in.]	1	199900301	EVALUATION OF SPAWNING OF FALL CHINOOK & CHUM SALMON	\$ already counted	
			3	199902500	Sandy River Delta Restoration	\$ already counted	
			2	200105300	Re-Introduction of Lower Columbia River Chum Salmon into Duncan Creek	\$ already counted	
	158 Develop an estuary action plan	Action Plan complete? [<i>The purpose of this actions is to develop an Action Agency estuary plan. The elements listed in the text of the action define the plan components. Those elements track with the other BiOp actions for the estuary. In essence the plan for 158 is supposed to be integrating all of the actions into a comprehensive program. The projects identified as 1's</i>]	1	30001	Historic habitat opportunities and food-web linkages of juvenile salmon in the Columbia River estuary: Implications for managing flows and restoration	\$ 298,779.50	
			3	30002	Optimization of FCRPS Impacts on Juvenile Salmonids: Restoration of Lower-Estuary and Plume Habitats	\$ 217,596.00	
			1	199801400	Ocean Survival of Salmonids	\$ 1,285,800.00	
			2	200201200	Lower Columbia River Habitat Assessment and Mapping	\$ 41,680.00	
	159	Develop a plan to address habitat needs of salmon and steelhead in the estuary	Plan complete? [<i>The plan for action 159 is to develop an assessment (scientifically based) that will support the selection and implementation of restoration projects. This plan, while being a stand alone document, will be included as an element of the overall plan called for by action 158. The project identified to support action 159 is BPA's hiring of Batelle Labs to facilitate plan development. Batelle is drawing on project 199801400, the LCREP management plan, and other key sources of information to develop the plan</i>].	1	200207600	Protect and Restore Lower Columbia River Estuary	\$ 159,000.00
	160	Develop an estuary restoration program to protect and enhance 10,000 acres over 10 years.	Restoration efforts identified, funded and underway? [Projects ranked 1 under this action directly addresses objective of a collaborative development of an estuary restoration plan. Projects ranked 2 identify current restoration opportunities which could be funded and underway by the 3 year check in. Projects ranked 3 may support these other projects.]	2	30004	Blind Slough Restoration Project, Brownsmeade OR	\$ 86,775.00
				3	30006	Effectiveness Monitoring of the Chinook River Estuary Restoration Project	\$ 62,402.00
				1	30016	Implement the Habitat Restoration Program for the Columbia Estuary and Lower Columbia River	\$ 500,000.00

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161	Fund an Estuary RME program	Program underway? [These projects are rated as 1's and 2's because they are providing important infrastructure for development of the RME plan. In the case of project 30015, the BiOp specifically mentions the Lower Columbia River Estuary Partnership as an entity that needs to be involved to implement estuary actions. The management plan for the partnership has a long-term monitoring plan that the Action agencies need to be referring to and using as fundamental piece of the RME plan development].	3	30002	Optimization of FCRPS Impacts on Juvenile Salmonids: Restoration of Lower-Estuary and Plume Habitats	\$ already counted
			1	30015	Lower Columbia River and Columbia River Estuary Ecosystem Monitoring and Data Management	\$ 130,000.00
			1	200207700	Estuary/ Ocean RME Support	\$ 96,000.00
162		Model available? [The reason that project 199801400 is identified here as a 1b is because that project produced the Salmon at the River's End report (this is a Science Center project) that included a conceptual model for the ecosystem. That report is fundamental infrastructure for the development of the conceptual model (i.e., description of ecosystem processes in the estuary). The action agencies are in the process of combining that work with the channel deepening conceptual model and other available work to come up a final conceptual model for the estuary].	1	199801400	Ocean Survival of Salmon	\$ already counted

Harvest Projects	164	Develop and deploy selective fishing methods.	Studies and/or pilot projects underway and/or methods deployed?	2	200100700	Evaluate Live Capture Selective Harvest Methods	\$ 632,698.00
	167	Improve methods for estimating incidental take in fisheries.	Studies and/or development of methods underway?	2	200100700	Evaluate Live Capture Selective Harvest Methods	\$ already counted

Hatchery Projects	169	Develop HGMPs for all Columbia basin hatcheries.	NMFS-approved HGMPs completed?	2	200300500	Hatchery and Genetic Management Plans	\$ 1,282,000.00
	174	Develop and implement a comprehensive marking plan	Marking strategy completed, funding provided, marking implemented, and experiments in place?	2	198201301	CODED WIRE TAG	\$ 2,100,000.00
				2	198201302	Annual Stock Assessment Coded Wire Tag Program	\$ 210,000.00
				2	198201303	Annual Stock Assessment Coded Wire Tag Program - USFWS. Note that there is a project number discrepancy. The Mainstem/Systemwide proposal for this project was submitted as 198906500.	\$ 115,500.00
				2	198201304	Annual Stock Assessment Coded Wire Tag Program	\$ 295,000.00
				2	198906500	Annual Stock Assessment - CWT (USFWS). Note that there is a project number discrepancy. This project is currently under project number 198201303 but was submitted under Mainstem/Systemwide as 198906500.	\$ already counted
	175	SNAPP	Four-step planning process completed for initial set of safety-net candidate populations?	2	200104900	Safety-net Coordinator	\$ 43,000.00
			2	200200400	Safety-net Artificial Production Program CRITFC	\$ 375,000.00	
			2	200200401	Safety-net Artificial Production Program NPT	\$ 90,000.00	

Critical Elements for BiOps

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			2	200200402	Safety-net Artificial Production Program IDFG	\$ 14,963.00

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Hatchery Projects			2	200200403	Safety-net Artificial Production Program SBT	\$ 25,000.00	
			2	200200404	Safety-net Artificial Production Program WDFW	\$ 4,000.00	
	177	Implement safety-net projects	Sustain approved safety-net projects implemented per RPA 175 and those specifically identified safety net projects presumed (but not originally identified) in the BiOp (code 600 projects)	4	198335000	Nez Perce Tribal Hatchery O&M, which includes Snake River fall chinook. (Accrual estimate for the whole project is \$4,248,185, however, only contract 4504 is BiOp critical.)	\$ 3,298,573.00
				3	198805301	Grande Ronde /Imnaha Endemic Spring Chinook Supplementation Program (NEOH)	\$ 2,927,512.00
				3	198805305	NE Oregon Outplanting Facility Master Plan - ODFW	\$ 60,000.00
				3	198805307	Parkdale Fish Facility O&M	\$ 280,000.00
				3	198805308	Hood River Powerdale/Oak Springs O&M	\$ 265,000.00
				4	198903500	Umatilla Hatchery Ops & Maintenance	\$ 804,624.00
				2	199009300	Genetic Analysis of Onchorhynchus nerka (Modified to Include Chinook Salmon)	\$ 135,000.00
				3	199107100	Sockeye Salmon Habitat and Limnological Res	\$ 427,485.00
				2	199107200	Redfish Lake Sockeye Salmon Captive Broodstock Program	\$ 1,123,232.00
				2	199204000	Redfish Lake Sockeye Salmon Captive Broodstock Rearing and Research	\$ 737,242.00
				3	199604300	Johnson Creek Artificial Propagation & Enhancement	\$ 949,085.00
				2	199606700	Manchester Spring Chinook Broodstock Project	\$ 517,000.00
				2	199700100	Idaho Chinook Salmon Captive Rearing	\$ 542,000.00
				2	199703800	Listed Stock Chinook Salmon Gamete Preservation	\$ 288,496.00
				3	199800701	Grande Ronde Endemic Spring Chinook Acclimation Site	\$ 95,000.00
				2	199800702	Grande Ronde Supplementation - Lostine River Spring Chinook	\$ 535,608.00
				2	199800703	Grande Ronde Supplementation - Grande Ronde and Catherine Creek	\$ 640,181.00
				2	199800704	Grande Ronde Supplementation Program	\$ 206,048.00
				2	199801001	Grande Ronde Basin Spring Chinook Salmon Captive Broodstock Program	\$ 699,921.00
				3	199801005	Pittsburgh Landing Fall Chinook Acclimation Facilit	\$ 200,000.00
				2	199801006	Captive Broodstock Artificial propagation	\$ 154,727.00
			3	199801007	Capt. John Rapid's Fall Chinook Acclimation Facility	\$ 200,000.00	
			3	199801008	Big Canyon Fall Chinook Acclimation Facility	\$ 215,000.00	
			2	200001900	Tucannon River Spring Chinook Captive Broodstock Program	\$ 97,721.00	

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R M & E Projects	179	Develop recovery goals.					
			1	200207500	TECHNICAL RECOVERY TEAM	\$ 364,800.00	
	180	Develop and implement a basin-wide monitoring program.	Draft program compete and implementation on schedule? [NMFS interprets this check-in as requiring, at a minimum: (1) BPA and BOR implementing a pilot status monitoring program in the John Day by spring 2003; (2) BPA implementing pilot status monitoring programs in the Wenatchee and one Snake River subbasin (preferably in Idaho) by spring 2003; (3) the Action Agencies developing a monitoring coordination process with state and tribal entities that is mutually acceptable early in 2003; (4) the Action Agencies, NMFS, and other Federal and non-Federal entities developing by September 2003 a more detailed status monitoring schedule and plan for extending the monitoring program beyond the three pilot subbasins by spring 2004; and (5) the Action Agencies coordinating the development of the status monitoring program with that of the effectiveness monitoring program through the implementation of a data management program]. [Projects directly supporting (or likely to directly support, for the case of undetermined Idaho subbasin) 1-4 above were given 2's. Included for the pilot studies (tasks 1 and 2) are the umbrella proposal 35019; a necessary John Day monitoring component 199801600; three key Idaho monitoring projects that may be necessary for the third subbasin; and infrastructure support in the form of PIT-tagging, data management, and smolt monitoring. The collaborative monitoring program 35033 directly supports task 3, although specifics of the project are still being developed. Two chum salmon projects and one fall chinook project (198910700) also were given 2's because they are the only ESUs that are not potentially addressed by the three pilot monitoring projects. Projects that support status monitoring basinwide, which BPA has discretion to determine are needed for the long-term monitoring program, were given 3's.]	3	27002 (200205300)	Assess Salmonids in the Asotin Creek Watershed	\$ 158,442.50
			3	35007	Evaluate Restoration Potential of Snake River Fall Chinook Salmon Spawning Habitat	\$ already counted	
			2	35019	Develop and Implement a Pilot Status and Trend Monitoring Program for Salmonids and their Habitat in the Wenatchee and Grande Ronde River Basins	\$ 135,000.00	
			2	199008001	PIT TAG PURCHASES	\$ 2,455,775.00	
			2	199107300	IDAHO NATURAL PRODUCTION & MONITORING	\$ 904,574.00	
			3	199202604	Life History of Spring Chinook & Summer Steelhead in Grande Ronde	\$ 871,712.00	
			3	199601900	Second-tier Database Support	\$ 252,111.00	
			3	199701501	Imnaha River Smolt Monitoring	\$ 244,240.00	
			3	199703000	LISTED STOCK CHINOOK ESCAPEMENT MONITORING	\$ 454,000.00	
			2	199801600	Salmonid Productivity, Escapement, Trend, and Habitat Monitoring in the Oregon Portion of the Columbia Plateau Province (Only 1 objective of the present contract is BiOp	\$ 1,059,648.00	
			3	199801900	WIND RIVER WATERSHED	\$ 572,800.00	
			2	199902000	Snake River Chinook Salmon Persistence and Spatial Dynamics	\$ 151,700.00	
			3	200003900	Walla Walla Natural Production M&E	\$ 382,889.00	
			3	200204900	Evaluate Factors Influencing Bias & Precision of Chinook Salmon Redd Counts	\$ 198,738.00	
			2	29039	The effects of fine sediment on the hyporheic zone: monitoring and evaluating the influence of hyporheic exchange flows on stream temperature.	\$ 51,019.50	
			2	31020	Monitor Coweeman River Salmonid Populations	\$ 138,981.00	
			2	35033	CBFWA Collaborative, Systemwide Monitoring and Evaluation Program	\$ 484,400.00	
			2	200001200	Evaluate factors limiting Columbia River gorge chum salmon populations	\$ already counted	
		2	199102800	Monitoring Smolt Migrations of Wild Snake River Spring/Summer Salmon	\$ 311,476.00		
		2	198712700	Smolt Monitoring by Federal and Non-Federal Agencies	\$ 1,957,269.00		
181	Acquire and digitize aerial or satellite imagery of the entire Columbia River basin once every 3 to 5 years	Coordinated program defined and underway? [Four activities have been identified by NMFS as constituting a "coordinated program...underway." Three of these projects are funded by sources other than BPA. Project 35016 was given a 2 because it is the only proposed project that addresses the fourth objective. NMFS is aware that the ISRP rated this project "do not fund" and this needs to be resolved by either modifying the proposal or finding another way to accomplish the same objective by September 2003.]	2	35016	A Pilot Study to Test Links Between Land Use/Land Cover Tier 1 Monitoring Data and Tier 2 and 3 Monitoring Data (modified scope)	\$ 218,000.00	

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R M & E Projects	182 Determine the reproductive success of hatchery fish in wild, with a minimum 2-4 studies per ESU beginning no later than 2003.	Priority studies initiated? [<i>The Biop indicates that 2-4 studies per ESU are expected. NMFS has determined that a lower number per ESU is acceptable, as long as those studies are high quality quantitative assessments. The 2's on this list represent studies to date that meet this criterion. The RFP is needed for those ESUs for which no acceptable studies have been proposed, including UCR and MCR steelhead and ocean-type fall chinook.</i>]	2	RFP	Request for Proposals to: Evaluate Spawning Effectiveness of Hatchery Fish	\$ 500,000.00
			2	35027	Evaluation of Two Captive Rearing Methods for Assisting with Recovery of Naturally Spawning Populations of Steelhead and Coho Salmon	\$ 236,470.50
			2	35041	Monitoring Reproductive Success of Naturally Spawning Hatchery and Natural Spring Chinook Salmon in the Wenatchee, Tucannon, and Kalama Rivers	\$ 415,237.00
			2	198909600	GENETIC M&E PROGRAM FOR SUPPLEMENTED SALMON & STEELH	\$ 260,600.00
			3	199506325	Yakima Fisheries Project M&E	\$ 3,275,388.00
			3	199005200	Performance/Stock Productivity Impacts of Hatchery Supplementation	\$ 291,669.00
			2	198909800	Idaho Supplementation Studies - Salmon	\$ 801,640.00
			2	198909801	Idaho Supplementation Studies - Salmon	\$ 113,000.00
			2	198909802	Idaho Supplementation Studies - Salmon	\$ 399,078.00
			2	198909803	Idaho Supplementation Studies - Salmon	\$ 217,896.00
	2	199005500	Idaho Supplementation Studies - Steelhead	\$ 659,715.00		
	183 Initiate three tier-3 studies per ESU.	Priority studies initiated? [NMFS has determined that no projects previously submitted represent adequate Tier 3 (effectiveness monitoring) studies. The RFQs are designed to provide a minimum level of pilot Tier 3 studies. Alternatively, it may be possible to achieve the same goal without RFPs by funding the umbrella project 35020 and improving the monitoring component of various ongoing projects. The other projects listed as 2's are either projects that have the potential to be modified into adequate Tier 3 studies, or are projects that will directly support the effectiveness monitoring program. Project 200300300 is likely to improve methods and coordination, whichever approach is used.]	2	RFQ	Request for Qualifications to: Develop Top-down Programmatic Tributary Action Effectiveness Pilot Projects	\$ 1,000,000.00
			2	RFQ	Request for Qualifications to: Perform Intensive Bottom-up Tributary Action Effectiveness Research	\$ 750,000.00
			2	200105500	NUTRIENT ENHANCEMENT STUDIES	\$ 619,901.00
			2	200206800	Evaluate Stream Habitat Using the Nez Perce Tribe Fisheries/Watershed M&E	\$ 290,837.00
			2	35020	Regional Project Effectiveness Monitoring Program for Columbia River Basin Listed Anadromous Salmonids.	\$ 237,500.00
			2	35024	Evaluating the sublethal impacts of current use pesticides on the environmental health of salmonids in the Columbia River Basin.	\$ 182,052.50
			2	200300300	Innovative Effectiveness of Restoration Projects - Use a multi-watershed Approach to Increase the Rate of Learning from Columbia Basin Watershed Restoration Projects	\$ 199,956.00
	184 Fund hatchery reform RM&E.	Priority studies identified or initiated? [This RPA Action anticipates a large number of potential reforms and conservation actions across ESUs. NMFS interprets "priority studies initiated" to mean key studies underway in five areas: (1) reduce deleterious effects of hatchery fish on wild populations by developing technology of broodstock programs to achieve higher survival of hatchery fish, thereby reducing releases of hatchery fish (199105500, 199305600, 200203100); (2) reduce deleterious effects of hatchery fish through disease control (35029, 35039, 20000700); (3) improve conservation of steelhead by developing and evaluating kelt reconditioning (200001700 and RFP); (4) evaluate conservation hatchery and supplementation success with respect to different rearing and release methods (35012, 35027, 5 Idaho supplementation studies, 199009300, 200203000); and (5) evaluate hatchery improvements with respect to effects on extinction risk and recovery of ESUs (RFP).]	2	RFP	Request for Proposals to: Evaluate Hatchery Reform Effects on ESUs	\$ 400,000.00
			2	35012	Spatial Scales of Homing and the Efficacy of Hatchery Supplementation of Wild Populations	\$ 185,050.00
			2	35027	Evaluation of Two Captive Rearing Methods for Assisting with Recovery of Naturally Spawning Populations of Steelhead and Coho Salmon	\$ already counted
			2	35029	Transfer IHN Genetic Strain Typing Technology	\$ 58,239.50
			2	35039	Influence of hatcheries and their products on health, physiology	\$ 151,724.00
			4	198335003	Nez Perce Tribal Hatchery M&E	\$ 1,770,000.00
			4	198805303	Hood River Production Program Warm Springs Tribe	\$ 520,000.00
			3	198805304	Hood River Production Program - ODFW	\$ 350,000.00
			4	198805312	HOOD RIVER STEELHEAD GENETICS STUDY	\$ 100,000.00
			2	198909800	Idaho Supplementation Studies - Salmon	\$ already counted
			2	198909801	Idaho Supplementation Studies - Salmon	\$ already counted
2			198909802	Idaho Supplementation Studies - Salmon	\$ already counted	
2	198909803	Idaho Supplementation Studies - Salmon	\$ already counted			
4	199000500	Umatilla Hatchery monit/evaluation projects	\$ 465,418.00			

	RPA Description	NMFS's Appendix F 2003 Check-In Criteria and Comments	NMFS Rating:*	Project or Proposal #	Project Name	Estimated FY03 Accrual as of 1/18/03**	
R M & E Projects			3	199005200	Performance/Stock Productivity Impacts of Hatchery Supplementation	\$ already counted	
			2	199005500	Idaho Supplementation Studies - Steelhead	\$ already counted	
			2	199009300	Genetic Analysis of Onchorhynchus nerka (Modified to Include Chinook Salmon)	\$ already counted	
			2	199105500	NATURES	\$ 517,000.00	
			2	199305600	RESEARCH ON CAPTIVE BROODSTOCK PROGRAMS FOR SALMON	\$ 1,120,000.00	
			3	199506325	Yakima Fisheries Project M&E	\$ already counted	
			3	199801004	M&E OF YEARLING SNAKE RIVER FALL CHINOOK	\$ 286,524.00	
			2	200000700	Infrastructure FDA Registration Erythromycin	\$ 76,456.00	
			2	200001700	KELT RECONDITIONING RESEARCH IN COLUMBIA BASIN	\$ 198,986.00	
			3	200007100	Analyzing Behavioral Changes During Salmonid Domestication	\$ 100,000.00	
			3	200104700	Reintroduction Success of Steelhead From Captive Propagation and Release Strategies	\$ 92,600.00	
			2	200203000	Progeny Markers for Salmonids	\$ 149,665.00	
			2	200203100	Growth Rate Modulation in Spring Chinook	\$ 325,826.00	
	185	Define juvenile survival for transported and not-transported fish and compare SARs to calculate D.	Expanded studies underway? [Projects 199302900 and 199602000 directly implement this Action, so receive a 1. Project design and interpretation of results are reliant on 199105100, so that also receives a 1. Management of related PIT-tag information is only available through 199008000, so this project receives a 2.]	1	199105100	Monitoring and Evaluation Statistical Support	\$ 351,929.00
				1	199302900	Estimate Survival for the Passage of Juvenile Salmonids Through Dams and Reservoirs of the Lower Snake and Columbia Rivers	\$ 1,486,869.00
				1	199602000	Comparative Survival Rate Study (CSS) of Hatchery PIT Tagged Chinook & Comparative Survival Study	\$ 483,509.00
				2	199008000	PTAGIS Columbia River Basin PIT Tag Information System	\$ already counted
	186	Determine whether the cause of D can be identified below Bonneville Dam.	Studies underway? [Some projects identified as 2's for RPA Action 185 also apply to this Action.]	3	199702400	Avian Predation	\$ already counted
	187	Evaluate relationships between ocean entry timing and SARs for transported and not-transported fish.	Studies underway? [Some projects identified as 2's for RPA Action 185 also apply to this Action.]	3	199602000	Comparative Survival Rate Study (CSS) of Hatchery PIT Tagged Chinook & Comparative Survival Study	\$ already counted
	188	Study PIT-tagged wild lower river stocks.	Studies underway? [198910700 and 199105100 are crucial to PIT-tag studies; John Day tagging project 199801600 is directly applicable.]	1	198910700	Statistical Support for Salmonid Survival Studies	\$ 254,943.00
				1	199105100	Monitoring and Evaluation Statistical Support	\$ already counted
				1	199801600	Salmonid Productivity, Escapement, Trend, Habitat Monitoring in the Oregon Portion of the Columbia Plateau	\$ already counted
	189	Investigate the causes of different SARs for juveniles of different hydrosystem passage histories.	Study plans under development or implementation? [Projects listed as 2's are directly applicable and necessary.]	3	199302900	Estimate Survival for the Passage of Juvenile Salmonids Through Dams and Reservoirs of the Lower Snake and Columbia Rivers	\$ already counted
				1	199602000	Comparative Survival Rate Study (CSS) of Hatchery PIT Tagged Chinook & Comparative Survival Study	\$ already counted
				1	200100300	Installation of Adult PIT-tag Detection Systems	\$ already counted
	190	Monitor growth, survival, and other early life history attributes of wild Snake River fall chinook.	Status report on continued funding of these studies? [199102900 is a good fit relative to flow impacts on juveniles; projects identified as 3's are relevant in terms of juvenile survival but not critical to meeting 2003 check-in]	2	199102900	The effects of summer flow augmentation on juvenile Snake River fall chinook salmon	\$ 565,821.00
				3	200203200	Investigating Passage of Listed Juvenile Chinook Salmon	\$ 231,988.00
192	Install adult PIT detectors and use the data to calculate transport benefits, conversion rates, SARs.	Adult PIT tag detectors installed? [All three studies are necessary to implement this RPA Action]	1	198910700	Statistical Support for Salmonid Survival Studies	\$ already counted	
			1	199008000	PTAGIS Columbia River Basin PIT Tag Information System	\$ already counted	

	RPA Description	NMFS's Appendix F 2003 Check-In Criteria and Comments	NMFS Rating:*	Project or Proposal #	Project Name	Estimated FY03 Accrual as of 1/18/03**	
R M & E			1	200100300	Installation of Adult PIT Detectors	\$ already counted	
	193	Develop state-of-the-art fish detection and tagging techniques for long-term RM&E efforts.	1	198331900	New Marking and Monitoring Techniques for Fish	\$ 1,365,798.00	
	194	Develop a physical model of the Columbia River plume.	1	35046	Estimate juvenile salmonid residence in the plume using micro-acoustic transmitters	\$ 1,297,800.00	
	195	Investigate the causes of juvenile mortality below Bonneville Dam.	Study plans under development or implementation? [This Action is to investigate post-Bonneville mortality and partition it into natural causes, delayed hydro effects, and other possible anthropogenic effects. Project 3507 is designed to investigate delayed hydro-related effects and the three other proposed projects listed as 2s could be critical to a well-designed study developed to partition natural and anthropogenic mortality. Because no projects directly address the full intent of the Action, an RFP has been developed. It is given a 1 in the expectation that one or more suitable projects will result.]	1	199801400	Ocean Survival of Salmonids	\$ already counted
				1	RFP	Request for Proposals to: Evaluate Extra Mortality- Existence and Causes	\$ 500,000.00
				2	35046	Estimate juvenile salmonid residence in the plume using micro-acoustic transmitters	\$ already counted
				2	35047	Evaluate Delayed (Extra) Mortality Associated with Passage of Yearling Chinook Salmon Smolts through Snake River Dams	\$ 541,950.00
				2	198910700	Statistical Support for Salmonid Survival Studies	\$ already counted
				2	199801400	Ocean Survival of Salmonids	\$ already counted
				196	Study juvenile and adult use of the estuary.	1	199801400
	197	Study juvenile and adult use of the plume.	Study plans under development or implementation? [Projects identified as 1's directly implement this Action.]	1	35046	Estimate juvenile salmonid residence in the plume using micro-acoustic transmitters	\$ already counted
				3	30010	Canada-USA Shelf Salmon Survival Study	\$ 209,400.00
				1	199801400	Ocean Survival of Salmonids	\$ already counted
	198	Develop a comprehensive database.	Under implementation? [NMFS interprets "under implementation" to mean a coordinated pilot data management system in 2003 for, at a minimum, the three subbasins addressed by RPA Actions 180 and 183. Project 35048 is the only project currently proposed with potential to accomplish this in the short term. Project 200107400 is a data management survey that is essentially complete and the Placeholder is for a future comprehensive data management program. Additionally, it will be necessary to maintain ongoing basin-wide infrastructure in anticipation of a larger, long-term comprehensive data management system. Projects potentially implementing the more comprehensive database received 3s while those necessary for the near-term pilot received 2s.]	3	Placeholder	Development of Comprehensive Database By 2004	\$ 250,000.00
				2	35048	NWFSC Salmon Data Management, Analysis, and Access for Research Monitoring and Evaluation Programs	\$ 381,575.00
				2	198201301	Coded Wire Tag Recovery Program	\$ already counted
				3	198810804	StreamNet, NW Hydropower Database Development	\$ 2,168,581.00
				2	199008000	PTAGIS Columbia River Basin PIT Tag Information System	\$ already counted
				2	199601900	Second-tier Database Support	\$ already counted
				3	199801100	Montana Natural Heritage Program	\$ 5,500.00
				3	200101700	Idaho Conservation Data Center	\$ 10,000.00
				3	200107400	NPPC Regional Data Needs	\$ 77,484.00
				199	Implement specific research actions.	Research in support of Actions 1-198? [The purpose of Action 199 was to describe specific research and monitoring activities related to other RPA Actions that were about to be implemented in December 2000. NMFS interprets Action 199 as having no substantive requirements. By authorizing take associated with specific projects, it was an administrative way of dealing with projects required by other RPA Actions. NMFS therefore did not rate these projects relative to Action 199 - all are addressed under other RPA Actions or are requirements of Incidental Take terms and conditions.]	-
	-	199102800	Monitoring Smolt Migrations of Wild Snake River Spring/Summer Salmon				\$ already counted
	-	199105100	Monitoring and Evaluation Statistical Support				\$ already counted
	-	199302900	Estimate Survival for the Passage of Juvenile Salmonids Through Dams and Reservoirs of the Lower Snake and Columbia Rivers				\$ already counted
	-	199602000	Comparative Survival Rate Study (CSS) of Hatchery PIT Tagged Chinook & Comparative Survival Study				\$ already counted
	-	199701501	Imnaha River Smolt Monitoring				\$ already counted
	-	199801600	Salmonid Productivity, Escapement, Trend, and Habitat Monitoring in the Oregon Portion of the Columbia Plateau				\$ already counted
	-	199900301	EVALUATION OF SPAWNING OF FALL CHINOOK & CHUM SALMON				\$ already counted
	-	200003900	Walla Walla Natural Production M&E				\$ already counted

RPA Description		NMFS's Appendix F 2003 Check-In Criteria and Comments	NMFS Rating:*	Project or Proposal #	Project Name	Estimated FY03 Accrual as of 1/18/03**
Incidental Take Statement Projects	N/A	Evaluate reach survival of juveniles	1	199302900	Estimate Survival for the Passage of Juvenile Salmonids Through the Lower Snake and Columbia	\$ already counted
			1	199602000	Estimate Survival for the Passage of Juvenile Salmonids Through the Lower Snake and Columbia	\$ already counted
		Evaluate adult survival, including unaccounted loss	1	200100300	Installation of Adult PIT Detectors	\$ already counted
		PIT tag detection facilities, including less intrusive technology	1	200100300	Installation of Adult PIT Detectors	\$ already counted
		Smolt Monitoring Program, including gas bubble disease	1	198331900	New Marking and Monitoring Techniques for Fish	\$ already counted
			1	198712700	Smolt Monitoring by Non-Federal Entities	\$ already counted
			3	198740100	Assess Smolt Condition - Biological and Environmental	\$ 187,000.00
			1	199403300	Fish Passage Center	\$ 1,302,904.00
			1	199602100	GAS BUBBLE TRAUMA MONITORING & RESEARCH OF JUV SALMON	\$ already counted
		Development of total dissolved gas model	3	200202700	Lower Snake Hydrodynamics and Water Quality	\$ already counted
	Water temperature modeling plan, including temperature data collection	3	200202700	Lower Snake Hydrodynamics and Water Quality	\$ already counted	
FWS BiOp Projects	11.A.3.1.f	NMFS did not rate these projects.	-	27002 (200205300)	Assess Salmonids in the Asotin Creek Watershed	\$ already counted
	11.A.2.1.b, 11.A.3.1.a		-	198712700	Smolt Monitoring by Non-Federal Entities	\$ already counted
	11.A.2.1.d		-	198802200	Umatilla R. Trap and Haul	\$ 329,826.00
	11.A.2.1.d, 11.A.2.1.e		-	198805304	Hood River NEOH M&E	\$ already counted
	8.2.a.9, 8.3.d, 8.4.a, 8.4.b		-	198806400	Kootenai River White Sturgeon Study and Experimental Aquaculture	\$ 1,600,000.00
	8.2.a.8, 8.2.a.9, 8.3.d, 8.4.b		-	198806500	Kootenai River Fisheries Recovery Investigations	\$ 825,391.00
	10.A.1.2		-	199101903	Hungry Horse Mitigation - Habitat	\$ 1,040,659.00
	11.A.2.1.b, 11.A.3.1.a		-	199403300	Fish Passage Center	\$ already counted
	11.A.1.4.a, 11.A.1.4.b, 11.A.1.4.d		-	199404700	Lake Pend Oreille Fishery Recovery Project	\$ 343,352.00
	8.1.f		-	199404900	Improving the Kootenai River Ecosystem	\$ 855,000.00
	10.A.1.1		-	199500400	Libby Mitigation Plan	\$ 830,000.00
	11.A.2.1.d, 11.A.2.1.e		-	199902400	Bull Trout Population Assessment	\$ 159,000.00
	8.3.i, 8.3.j		-	200200200	Assess Feasibility of Enhancing White Sturgeon Spawning Substrate Habitat, Kootenai R., Idaho	\$ 175,000.00
	10.8, 11.A.3.1.d, 11.A.3.1.f		-	200200600	Evaluate Bull Trout Movements in the Tucannon and Lower Snake Rivers	\$ 222,010.00
	11.A.1.4.b, 11.A.1.4.d		-	200200900	Lake Pend Oreille Predation Research	\$ 148,000.00

Critical Elements for BiOps

	RPA Description	NMFS's Appendix F 2003 Check-In Criteria and Comments	NMFS Rating:*	Project or Proposal #	Project Name	Estimated FY03 Accrual as of 1/18/03**	
BiOp Technical Support Contracts	9	Develop plans for research, monitoring, and evaluation to determine action effectiveness.	Each BiOp Technical Support Contract Addresses Most or All of These RPAs	Not Rated	198910800	Modeling & Evaluation Support/CRISP - UW Columbia Basin Research	\$ 479,008.00
	13	Issue annual reports on progress toward performance standards and issue comprehensive reports in years 3, 5, and 8.		Not Rated	199303701	Technical Assistance - Paulsen Environmental Research	\$ 193,179.00
	161	Address estuary objectives through a research and monitoring program.		Not Rated	199800100	Support - ESA Biology Assessments - Hinrichsen Environmental Services	\$ 134,498.00
	180	Develop and implement a basin-wide hierarchical monitoring program to determine population status and progress toward performance measures.		Not Rated	199601700	Technical Support - BioAnalyst Inc.	\$ already counted in overhead (\$332,102)
	183	Initiate three tier-3 studies within each ESU and two		Not Rated	200200500	BiOp Implementation Technical Support - Fisher Fisheries	\$ 97,411.00
				1	200207700	Estuary/Ocean RME Support - Battelle	\$ already counted in RPA 161 (\$96,000)

Baseline Projects		NOAA Fisheries did not review or rate Baseline	-	198343500	Bonifer\minthom release & collection facility	\$ 880,554.00
			-	199405000	Salmon River Habitat	\$ 243,380.00
			-	198343600	UMATILLA PASSAGE O&M	\$ 460,555.00
			-	200003300	Walla Walla River Fish Passage O&M	\$ 82,163.00
			-	198902700	Umatilla Pumping	\$ 1,237,651.00
			-	199200900	Yakima Ph.2 Screen O&M WDFW	\$ 139,590.00
			-	199503300	Yakima Ph.2 Screen O&M BOR	\$ 100,000.00

Overhead \$ 12,000,000.00

TOTAL \$ 107,029,043.50