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April 6, 2011

DECISION MEMORANDUM

TO: Council

FROM: Fish and Wildlife Staff

SUBJECT: Partial Decision Memorandum: "A list" subset of projects and associated

programmatic issues from the review of Research, Monitoring and Evaluation and

Artificial Production Projects

This is a decision memorandum explaining briefly the subset of decisions in this Research, Monitoring and Evaluation and Artificial Production Projects (RME/AP) category review that are up for Council decision based on the recommendations of the Fish and Wildlife Committee made on April 5. The Committee meeting occurred after the April Council packet was prepared. This revised memorandum with attachments reflects the Committee's recommendation from its April 5th meeting, including changes approved by the members and technical edits from staff.

The items described here for decision are extracted from the rolling decision document that will cover the entire review The rolling decision document also describes the review process and provides other context for this subset of decisions.

Staff is recommending that the Council approve the subset of A-list projects as now recommended by the Fish and Wildlife Committee at its April 5th meeting. Included in this decision, are resolutions for two programmatic issues associated with some of the projects on the "A-list" -- artificial production monitoring and evaluation and PIT tags and related tags. The "A-list" project summary of recommendations is included as Attachment 2.

What follows is the detailed explanation of the components of this partial decision.

Bifurcated process for making recommendations

The "A list" of projects

The Council will be making project recommendations in two phases over the next few months. Following the ISRP review report and public comment period, a staff review identified a significant number of the projects in the RME/AP review as ready for the Fish and Wildlife Committee to consider for recommendation to the full Council on April 5, and for the full Council to consider for decision at the April Council meeting. Attachment 2 is a spreadsheet identifying this "A list" of projects (and the rest on the "B list") and is incorporated as part of this document. Projects on the "A list" are those not tied to or otherwise subject to an overarching programmatic issue still in need of resolution, and which do not present project-specific concerns. Note that the fact that a project is on the "A list" does not mean it is more important, or of higher priority, or raises fewer concerns, than the projects on the "B list." The bifurcation is merely a device for managing the issues in the review

Generally, staff recommendations for the projects on the "A list" are consistent with the ISRP's recommendations. One exception concerns the kelt reconditioning projects, which the ISRP does not recommend. In this review and in past reviews the Council has addressed the ISRP's concerns in large part by treating these kelt projects as research projects and therefore limiting the duration of the project and requiring submission of findings and results report before any further commitment is made to the concept. The staff will write a more formal explanation required by Section 4(h)(10)(D) of the Northwest Power Act as part of the completion of the review. There are a few other projects where the ISRP's qualifications have been addressed in project-specific comments in ways somewhat different than precisely as the ISRP recommended. The staff does not believe any of these recommendations are directly in conflict with the ISRP's recommendations. The staff can explain these at the April meeting if necessary; formal written explanations will be provided as part of the completion of the review.

Projects on the "B list are tied to programmatic issues still in need of resolution. These programmatic issues are clearly described in Part 2 of the rolling decision document. The issue descriptions highlight plausible resolutions of these issues, and the work remaining to resolve the issues. The descriptions also highlight the likely effects on specific projects -- in most respects the specific projects have favorable reviews and will likely go forward as proposed. But the broader issues raised in the review need to be addressed first, and resolutions of the programmatic issues will indeed affect some of the specific projects. A few of the projects on the "B list" are there because of project specific issues still to be worked out. These issues are identified in the comments on the project spreadsheet.

The process for resolving the programmatic issues for the "B list" projects will also include evaluation of the ISRP's March 30, 2011 report of its review of the Columbia Habitat Monitoring Program (CHaMP) protocols. Staff will also weigh ISRP input in determining an individual project's support of and consistency with key policy criteria developed out of the Fish and Wildlife Program and outlined at the outset of the review. Council staff are working with the Fish and Wildlife Committee on the schedule for this evaluation, and anticipate that it will be complete by the end of June 2011. Until these issues are resolved, there is no intent or suggestion that projects which are coming up for BPA contract reviews should be delayed due to this

process. The Council intends in this review to be as consistent as possible with the outcome of recent regional discussions and arrangements regarding research, monitoring and evaluation, such as occurred at Skamania in 2009, and to be similarly consistent where possible with prior scientific reviews and Council commitments in project review. The Council also intends to honor the commitments made by Bonneville and other participants in the Skamania/ASMS process, as much as possible. The Council's review process should not be used to impede implementation or integrity of projects currently on the B list or commitments previously made concerning those projects.

The staff recommendation for most of the "A list" projects is for the Council to recommend *funding for implementation*, albeit with appropriate conditions and comments noted in the comment field on the spreadsheet. These comments and conditions are based in the ISRP review or in a set of coordinated Council/Bonneville staff reviews of the projects and project history. A few projects on the "A list" come with a staff recommendation not to fund, most often because the work has been or will soon be completed and the project needs to wrap up. And a number of the projects on the "A- list" are associated with the resolution of two programmatic issues, -- artificial production, and PIT/other tagging -- described below.

The full "A-list" recommendation for Council consideration, including the two programmatic issues and project recommendation for 100 projects, is described in detail below:

There are a number of projects on the "A list" that are subject to one of two programmatic issues, one concerning the monitoring and evaluation of artificial production (issue no. 4 in the list of programmatic issues in the rolling decision document below) and the other concerning PIT tags and related tags (issue no. 10). The staff and Fish and Wildlife Committee, with minor revisions, recommend these programmatic issues for resolution by means of Council recommendations, which is the reason the projects may also be included on the "A list" of projects. The two programmatic issues and the Committee/staff recommendations are as follows, extracted from Part 2 of the rolling decision document below:

Programmatic issue #4: Monitoring and evaluating the effectiveness and effects of artificial production actions

The artificial production portion of the category review includes (a) projects that involve the planning, development, operation and maintenance of artificial production activities funded under the Council's Fish and Wildlife Program; (b) separate projects that direct the monitoring and evaluation of these production initiatives; and (c) a set of research, monitoring, evaluation and coordination projects aimed more generally at investigating the effectiveness and effects of artificial production. The Independent Scientific Review Panel favorably reviewed the projects in the category, finding them largely well designed with the ability to report data important to the implementation of regional artificial production goals and objectives. This is due in large part to the number of times many of these projects have been reviewed and improved in the past, upon which significant production commitments have been made under the Fish and Wildlife Program, Columbia Fish Accords, and the *U.S. v. Oregon* agreements and analyses.

Even so, the review by the ISRP and by the Council staff, and the continued stream of information about production that comes the Council's way, continues to highlight critical issues

and uncertainties with production. The key question that continues to be asked of the production efforts in the basin, both funded under the Program and otherwise, is whether the production of hatchery-origin fish is or might be having unacceptably adverse effects on the fitness of natural-origin fish, adverse effects that might overwhelm whatever are the benefits of the artificial production. There is still uncertainty and contention around this question, as well as a body of hatchery reform recommendations, such as the HSRG report and the work of the Ad Hoc Supplementation Workgroup intended to reduce that risk and uncertainty through recommendations that might be applied more aggressively in certain cases. It is thus not clear whether the production effort under the Fish and Wildlife Program, individually and collectively, is designed and coordinated sufficiently (within the program and with production activities funded outside the program) to be able to evaluate this relationship to the extent we need to and, especially, to then be able to implement hatchery reform measures to improve and protect natural-origin fish when a potential problem is identified.

The lack of a regionally coordinated umbrella for the ongoing collection of monitoring information and the evaluation and reporting of conclusions on hatchery effects and effectiveness thus remains a concern. The multi-agency Anadromous Salmonid Monitoring Strategy (ASMS) helps, but it is not itself the vehicle for the coordinated accumulation and evaluation of the relevant data on production. However, the RME/AP review does contain one newly defined Bonneville/NOAA project aimed precisely at this need, consistent with the ASMS -- the Columbia River Hatchery Effects Evaluation Team (CRHEET). Unfortunately, the CRHEET project is still under development, and not enough is known yet of the details to be able to assess whether and how it will serve the need. The federal agencies sponsoring the project are deferring the beginning of the CRHEET project until the next fiscal year, giving the Council and others time to participate in the effort to work out the project details in the right way.

Staff's programmatic recommendation: The Council, as part of its decisions in this RME/AP review, recommends that the federal agencies incorporate the following principles when designing and implementing an umbrella approach to the monitoring and evaluation of artificial production effectiveness and effects:

- The technical workgroup or team established for this purpose be truly a multi-agency team drawn from the federal, state and tribal agencies and Council staff, with a few unaffiliated members as well.
- Avoid another general review of the problems and benefits of artificial production, nor another separate effort to evaluate all individual production activities and programs. We have many such reviews, guidelines, recommendations, and experiences to draw from over the last 15 years, including most recently the work of the Hatchery Scientific Review Group (HSRG). We also have a plethora of ongoing processes in which to bring this information to bear, including project reviews, step review planning, and hatchery consultations under the Endangered Species Act.
- The Team should build on previous efforts to further the monitoring and evaluation of hatchery effects and effectiveness. This includes the "Recommendations for Broad Scale Monitoring to Evaluate the Effects of Hatchery Supplementation on the Fitness of Natural Salmon and Steelhead Populations - Final Draft Report" from the Ad Hoc Supplementation Monitoring and Evaluation Workgroup (AHSWG 2008); the HSRG's

recommended metrics; the ISRP's Metrics Review (ISRP 2008-7); and the joint report of the ISRP and ISAB on the Monitoring and Evaluation of Supplementation Projects (ISRP/ISAB 2005-15).

- The Team should develop a standard set of reporting metrics for the monitoring and data collection efforts, necessary for any overall or comparative evaluation of hatchery effectiveness and effects as a main focus of the umbrella effort. These metrics should include:
 - o PNI values (proportionate natural influence on a composite hatchery-/natural-origin population)
 - HOB and NOB values (number of hatchery-origin fish and natural-origin fish used as hatchery broodstock) and pNOB values (proportion of hatchery broodstock composed of natural-origin fish)
 - O HOS and NOS values (number of hatchery-origin fish and natural-origin fish spawning naturally) and pHOS values (proportion of natural spawners composed of hatchery-origin fish)
 - o HORs and NORs values (number of hatchery-origin recruits and natural-origin recruits)
 - o stray rates
 - o carrying capacity in areas affected by production releases and returns (ultimately information will also need to be developed and integrated on carrying capacity for juveniles in mainstem migration corridors and the estuary)
 - o life history characteristics and genetic diversity for naturally spawning populations from both production and non-production reference streams
 - o comparative productivity, abundance, diversity and fitness measures for naturally spawning populations from both production and non-production reference streams
 - o comparative timing of returns of hatchery-origin and natural-origin fish
- The Team should also establish or identify a readily accessible means by which to share
 the data reported on these metrics, to facilitate assessments at level above individual
 production activities.
- The Team should then work with management and policy representatives across the agencies in the Pacific Northwest to make sure these metrics are consistently used, reported on and evaluated in whatever review process is underway. This includes project reviews, "three-step" reviews or similar reviews of proposals for new production, hatchery consultations, decisions on research priorities relating to production, and broad-scale program planning decisions that include issues of production policy. Further, management and policy representatives across the agencies in the Pacific Northwest should make sure that any proposed changes to current hatchery production and associated infrastructure, such as new or upgrades to production or weirs, should be reported to the team so that these changes can be taken into account in the basinwide effort to assess hatchery effects and effectiveness.
- In a second main focus for this effort, the Team should be clear about what analytical techniques it will use or suggest be used to evaluate this information, as well as any large-scale experimental designs that the team recommends as necessary to address

critical uncertainties. The team should also develop and recommend a clear approach for how the evaluation results should be regularly reported and used to guide production reform and improvement activities.

- In consultation with the Council and others in the region, the Team should develop and recommend a set of criteria to help prioritize research questions, including efforts to assess relative reproductive success.
- The Team should annually report its progress on the tasks it undertakes. This should include progress on the use and reporting of the standardized metrics. As the team develops and implement its approach for evaluating hatchery effects and effectiveness, the report should also include recommendations regarding infrastructure and other needs to assure that data on these metrics can be collected and shared efficiently. The annual report should also assess ongoing production reform activities and the extent to which the team's activities are having a practical effect.
- The Team should also regularly report -- perhaps every three to five years -- on the analytical results of the monitoring, data collection, research, evaluation and production reform activities, including an assessment of the extent to which the results and the way the results are being used are narrowing the uncertainties and reducing risks.

Staff recommendation for projects related to this issue: On this basis, the staff then also proposes that the Council recommend implementation of the projects relating to artificial production as proposed and reviewed, as part of the decision on the "A list" of projects in April. However, all of the artificial production projects on the "A list" that involve research, monitoring and evaluation should be contracted in such a way that the Council may revisit and recommend revisions to a project if and when needed to reflect the progress made through the umbrella approach as described above. As such, all the projects within this group carry the following implementation condition: "Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation no. 4."

Programmatic issue #10. PIT tags and related tags

The ability to mark and tag fish is one of the most important and useful techniques available to fishery managers and researchers. Tagging of salmon, steelhead and other fish species using Passive Integrated Transponder (PIT) tags, as well as use of active tags such as acoustic and radio telemetry, is a key tool for monitoring and evaluating both juvenile and adult salmon passage from headwater rearing areas through the mainstem hydropower projects, into the ocean, and back to the spawning grounds. Both passive and active tags are used in a wide array of research, monitoring and evaluation (RM&E) projects throughout the Columbia Basin. Fish tagging projects utilizing both passive and active tags are funded under the Council's Fish and Wildlife Program, the 2008 FCRPS Biological Opinion, the Fish Accords, various Habitat Conservation Plans, the Corps-sponsored Anadromous Fish Evaluation Program (AFEP), and state salmon and steelhead recovery efforts. Collectively, these programs utilize either active or passive tags (or both) to monitor the status of fish populations, evaluate the effectiveness of various management actions, and resolve critical uncertainties in recovery strategies.

There are 12 projects in the review involving PIT tagging (11 projects) or the use of otolith marking (1 project) in monitoring, evaluation and research. Estimated total three-year average funding proposed for all tagging projects in this programmatic topic area for FY2012-2014 is approximately \$15 million. All of these projects are important to implementation of the FCRPS Biological Opinion and the projects themselves received largely favorable reviews by the ISRP.

Even so, the ISRP and other reviews have raised issues about the suite of tagging projects. One is whether all these tagging efforts are sufficiently well coordinated so that we have a comprehensive monitoring and evaluation program addressing the critical data gaps or uncertainties, and so that tags, data and results are being shared among sponsors in such a way to adaptively manage future work. A related issue pertains to the status of the data collected to date and what it is telling us. A third concerns uncertainties about the extent of the physical effects of the PIT tag itself on fish, an issue currently under evaluation.

At the same time, the federal Action Agencies and NOAA Fisheries are working on developing a draft regional PIT Tag Plan. The intent of the plan is to foster better coordination and optimization of future tagging efforts, as well as efficient strategic placement of PIT detection systems throughout the Columbia River Basin. The PIT Tag Plan will be a major component of a broader Regional Tagging and Marking Plan that has been recommended by the ISRP/ISAB (2009), consistent with FCRPS Biological Opinion (RPA 52.6.) The scope of the PIT Tag Plan will also include non-ESA listed fish species. However, the current draft plan focuses on anadromous salmonid management issues. The purpose of the regional PIT Tag Plan under development is to evaluate, coordinate, and recommend the most efficient and effective tagging and detection systems needed to meet the monitoring and research needs of population status and trends, hydropower system passage and operations, habitat, hatchery, harvest management, and estuary and ocean conditions, to the extent feasible for anadromous salmonids in the Columbia River Basin. An important part of the plan will be to recommend required detector locations and capabilities, along with PIT-tagging efforts and analytical methods, with supporting rationale discussing how the precision of critical monitoring estimates may be improved, and how these improved estimates are expected to lead to better management decisions. Once a draft regional PIT Tag Plan is developed, it will be regionally reviewed and vetted, with input provided by the region's fishery agencies, tribes and other interested parties.

Staff recommendation: On this basis, the staff's preferred recommendation is for continued funding to implement all of the PIT and the otolith tagging projects with appropriate conditions. There should be a *presumptive path* to continue funding for these projects unless substantive issues related to PIT or otolith tagging are identified for any of these projects in the 2013 NMFS Biological Opinion check-in report, in the completed Regional PIT Tag Plan, in the broader Regional Tagging and Marking Plan recommended by the ISRP/ISAB (which the Council encourages the agencies to develop), and/or the completed review of LSRCP hatcheries. If necessary, make any adjusted funding recommendations.

Form and duration of the multi-year project recommendations

One overarching issue with regard to the individual projects is the form and duration of the recommendations. Making a decision on the "A list" of the projects will by necessity include also deciding on the form and duration of specific project recommendations.

Duration and conditions

The recommendation for individual projects is articulated in the last column on Attachment 2 - "summary of RM&E/AP Review "A-list" project Recommendations. Staff proposes multi-year funding recommendations for the RME/AP projects that extend from FY2012 through FY 2016. The duration of any particular project recommendation will vary from one to five years depending on the type of project, the project conditions, when the project is due to be completed, and if there is delivery of a product to review prior to a recommendation for additional years of funding. For example, the RME review includes a number of research projects (approximately 30) across the spectrum of the Fish and Wildlife Program. Some are pure research; some are projects that mix research elements with other aspects of monitoring, evaluation, assessment, or on-the-ground actions. Staff is recommending that all research projects receive no more than three-year funding recommendation. Out-year funding will be dependent on ISRP and Council review of the reports of research results and a proposal for further work (see more on research projects in programmatic issue # 6 at the end of this review).

Review con siderations

The project recommendations brought forth by staff will be based on sound scientific principles, Fish and Wildlife Program review, and other considerations articulated during the process. Collectively, this work is intended to support and address the Council's Fish and Wildlife Program, as also integrated with the requirements of the FCRPS Biological Opinion and the commitments made by Bonneville with the parties to the Columbia Fish Accords.

Funding considerations and expectations

The staff recommendations will not include individual project budgets or annual budgets. A multi-year funding recommendation that does not set a particular budget allows Bonneville and the sponsors' flexibility in contracting and spending over the life of the project recommendation. Bonneville may also identify areas for cost savings within the work elements and the funding conditions identified by staff. In each case, Bonneville will have the flexibility to negotiate with sponsors through contracting to finalize work and budgets. Actual spending by Bonneville for each project should be sufficient to maintain project integrity as the ISRP reviewed it. With any multi-year funding recommendation, staff recommends the Council include the following general expectations:

- 1. The ISRP's science review of the projects is sufficient for the duration recommended for the project. Additional review generally will not be needed for the duration of the recommendation, with two exceptions: (1) when the project recommendation is conditioned upon the ISRP reviewing a deliverable (such as a comprehensive management plan) within or at the end of the funding period, or (2) when new components outside of the scope or intent of the project at the time of this review are proposed by the project sponsor or Bonneville during the funding period. In these cases, the delivered product or the new project components will be reviewed by the ISRP and a recommendation made by the Council prior to further funding.
- 2. Bonneville will provide start-of-year budgets for each project in this portfolio prior to the beginning of the next fiscal year, which should also include: (1) trend information to show how and why the overall budget will change from the previous year, and (2) how

inflation and cost-of-living adjustments are to be applied, if any; and (3) any modifications to scope negotiated with the project sponsor.

- 3. Bonneville will work with the Council to track and follow-up on items or project conditions that require the sponsor to deliver products as part of the funding recommendations.
- 4. Bonneville will work with sponsor to address ISRP qualifications and other conditions during contracting when and as recommended by the Council.
- 5. Bonneville will provide adequate funding to maintain the integrity of the project as reviewed by the ISRP and recommended by the Council.

Project package total and savings

While the recommendation does not include individual project budgets, the Council recognizes the general starting budget for projects within this initial set. For FY 2012, Bonneville's projected budget for the 100 A-list projects is \$81.2 million. This set of projects includes ongoing, new and modified or expanded projects, in addition to projects that are winding down or are not recommended for funding in FY 2012 and beyond. This recommendation has led to a reduction of roughly \$2.8 million in FY 2012 projected budgets.

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	(B List projects included at the charter reference chary)										
#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
1	A	AP	198335000	Nez Perce Tribal Hatchery Operations and Maintenance (O&M)	Nez Perce Tribe	Yes	Х		\$2,155,377	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
2	A	АР	198335003	Nez Perce Tribal Hatchery Monitoring and Evaluation (M&E)	Nez Perce Tribe	Yes	х		\$2,014,154	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
3	A	AP	198343500	Umatilla Hatchery Satellite Facilities Operations and Maintenance (O&M)	Umatilla Confederated Tribes (CTUIR)	Yes		Х	\$1,021,394	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
4	A	АР	198805301	Northeast Oregon Hatchery Master Plan	Nez Perce Tribe	N/A	Х		\$0	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process based on May 9, 2006 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
5	A	AP	198805303	Hood River Production Monitoring and Evaluation (M&E)-Warm Springs	Confederated Tribes Of Warm Springs	In Part (Qualified)		Х	\$622,062	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per October 15, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
6	A	АР	198805304	Hood River Production Monitor and Evaluation (M&E)-Oregon Department of Fish and Wildlife (ODFW)	Oregon Department Of Fish and Wildlife (ODFW)	In Part (Qualified)	Х		\$515,430	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per October 15, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
7	A	AP	198805305	Northeast Oregon Outplanting Facilities	Oregon Department Of Fish and Wildlife (ODFW)	N/A			\$0		Do not implement at this time. Linked to 198805301 construction of NEOH. The Council will revist if/when facitlity is scheduled for construction.
8	A	АР	198805307	Hood River Production Operations and Maintenance (O&M)-Warm Springs	Confederated Tribes Of Warm Springs	In Part (Qualified)		Х		Art. Prod: effects and effectiveness monitoring, Pit Tag and other Tagging	Implement through outcome of Step Review process per October 15, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
9	А	АР	198805308	Hood River Trapping Operations and Maintenance	Oregon Department Of Fish and Wildlife (ODFW)	In Part (Qualified)	х		\$619,485	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per October 15, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
10	A	АР	198805315	Hood River Revised Master Plan Implementation	Confederated Tribes Of Warm Springs, Oregon Department Of Fish and Wildlife (ODFW)	In Part (Qualified)		Х	\$0	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per October 15, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec		Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
11	A	АР	198811535	Klickitat River Design and Construction-Yakima/Klickitat Fisheries Project (YKFP)	Yakama Confederated Tribes	Yes (Qualified)		х		Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per August 13, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
12	A	АР	198812035	Klickitat River Management, Data and Habitat- Yakima/Klickitat Fisheries Proiect (YKFP)	Yakama Confederated Tribes	Yes (Qualified)		Х	\$497,164	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Implementation subject to outcome of a regional hatchery effects evaluation process and expected Step Review (see project 198811535).
13	Α	АР	198902401	Umatilla Juvenile Salmonid Outmigration and Survival	Oregon Department Of Fish and Wildlife (ODFW)	Yes	х		\$365,156	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
14	A	АР	198903500	Umatilla Hatchery Operations and Maintenance (O&M)	Oregon Department Of Fish and Wildlife (ODFW)	Yes (Qualified)			\$1,095,616	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Sponsor to address ISRP qualifications in 2012 contract; and Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
15	A	АР	198909800	Salmon Studies in Idaho Rivers- Idaho Department of Fish and Game (IDFG)	Idaho Department of Fish and Game (IDFG), Nez Perce Tribe, Shoshone-Bannock Tribes, US Fish and Wildlife Service (USFWS)	In Part (Qualified)	х	х	\$2,010,932	Art. Prod: effects and effectiveness monitoring	Implement through 2016 with condition per April-May 2010 Council decision for Fast Track projects: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
16	A	АР	199000500	Umatilla Hatchery Monitoring and Evaluation (M&E)	Oregon Department Of Fish and Wildlife (ODFW)	Yes	х		\$667,817	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
17	A	AP	199000501	Umatilla Basin Natural Production Monitoring and Evaluation (M&E)	Umatilla Confederated Tribes (CTUIR)	In Part		х	\$833,845	Art. Prod: effects and effectiveness monitoring	Implement through 2016, with the exception of Objective 3 and Deliverable 7 of Objective 4 per ISRP's review. Implementation also conditioned on the regional hatchery effects evaluation process described in programmatic recommendation #4.

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#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	BiOp		FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
18	A	АР	199005500	Idaho Steelhead Monitoring and Evaluation (M&E) Studies	Idaho Department of Fish and Game (IDFG)	Yes (Qualified)	Х	х	\$806,075	Art. Prod: effects and effectiveness monitoring	Implement through 2016 with condition per April-May 2010 Council decision for Fast Track projects: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
19	A	АР	199107300	Idaho Natural Production Monitoring and Evaluation (M&E)	Idaho Department of Fish and Game (IDFG)	Yes	X		\$877,449	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016 per April-May 2010 Council decision for Fast Track projects: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
20	A	АР	199202604	Life History of Grande Ronde River Spring Chinook Salmon and Steelhead	Oregon Department Of Fish and Wildlife (ODFW)	In Part (Qualified)	X		\$1,196,104	Art. Prod: effects and effectiveness monitoring	Implement Objectives 1-4 only with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
21	А	АР	199305600	Research to Advance Hatchery Reform	National Oceanic and Atmospheric Administration (NOAA)	Yes	Х			Art. Prod: effects and effectiveness monitoring, Research	Implement through 2014 per April-May 2010 decision for Fast Track projects: Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
22	А	АР	199306000	Select Area Fisheries Enhancement	Clatsop County Fisheries, Oregon Department Of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW)	Yes	Х		\$1,908,145		Implement through FY 2016. Consistent with the original intent of this project this project will work toward being self-sustaining by 2017.
23	A	АР	199506325	Yakima River Monitoring and Evaluation-Yakima/Klickitat Fisheries Project (YKFP)	Yakama Confederated Tribes	Yes (Qualified)		х	\$4,877,513	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Sponsor to address ISRP qualifications in contracting, submit Master Plan by end of FY 2012 for coho and Fall Chinook, and conduct an ISRP review of YKFP in conjunction with the Yakama Fisheries Reviews. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation.#4
24	A	АР	199506335	Klickitat River Monitoring and Evaluation-Yakima/Klickitat Fisheries Project (YKFP)	Yakama Confederated Tribes	Yes (Qualified)		Х	\$1,438,872	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per August 13, 2008 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
25	A	АР	199604000	Mid-Columbia Reintroduction Feasibility Study	Yakama Confederated Tribes	Response requested		Х	\$2,212,617	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process per March 9, 2010 Council decision. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
"FY12	BPA pro	piected buda	et" generally re	epresents the expense-only funding	basis for FY12.	3					Council Decision Memo April 2011

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
26	А	AP	199604300	Johnson Creek Artificial Propagation Enhancement	Nez Perce Tribe	Yes (Qualified)	х		\$1,070,437	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4. Any expanded production work would need to undergo Step review and successful ISS experiment.
27	А	АР	199701325	Yakima River Operations and Maintenance (O&M) for Hatcheries and Acclimation Sites-Yakima/Klickitat Fisheries Proiect (YKFP)	Yakama Confederated Tribes	Yes (Qualified)		Х	\$3,131,765	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Sponsor to address ISRP qualifications in 2012 contract. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
28	А	АР	199701335	Klickitat River Operations and Maintenance (O&M) for Hatcheries and Acclimation Sites-Yakima/Klickitat Fisheries Project (YKFP)	Yakama Confederated Tribes	Yes (Qualified)		Х	\$365,192	Art. Prod: effects and effectiveness monitoring	Implement per August 13, 2008 Council decision through Step Review process with condition: Implementation subject to outcome of a regional hatchery effects evaluation process described in programmatic recommendation #4.
29	A	AP	199701501	Imnaha River Smolt Monitoring	Nez Perce Tribe	Yes (Qualified)	х		\$342,611	Art. Prod: effects and effectiveness monitoring	Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
30	A	АР	199703000	Chinook Salmon Adult Abundance Monitoring	Nez Perce Tribe	Yes	х		\$472,582	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016 per April-May 2010 decision for Fast Track projects: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
31	А	AP	199703800	Listed Stock Chinook Salmon Gamete Preservation	Nez Perce Tribe	Yes (Qualified)	Х		\$42,197	Art. Prod: effects and effectiveness monitoring	Implement gamete preservation objective (Obj 1), through FY 2016.
32	А	АР	199800702	Grande Ronde Supplementation Operations and Maintenance (O&M) and Monitoring and Evaluation (M&E) on Lostine River	Nez Perce Tribe	Yes (Qualified)	х		\$790,514	Art. Prod: effects and effectiveness monitoring	Implement per April-May 2010 Council decision for Fast Track projects through 2016 with condition: Implementation subject to Lower Snake Comp Review process and the hatchery effects evaluation process described in programmatic recommendation #4.
33	А	АР	199800703	Grande Ronde Supplementation O&M on Catherine Creek/Upper Grande Ronde River	Umatilla Confederated Tribes (CTUIR)	Yes (Qualified)		Х	\$645,372	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Sponsor to address ISRP qualifications in 2012 contract. Implementation subject to Lower Snake Comp Review process and the hatchery effects evaluation process described in programmatic recommendation #4.

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
34	A	АР	199801004	Monitor and Evaluate (M&E) Performance of Juvenile Snake River Fall Chinook Salmon from Fall Chinook Acclimation Project	Nez Perce Tribe	Yes	х			Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Implementation subject to Lower Snake Comp Review process and the hatchery effects evaluation process described in programmatic recommendation #4.
35	A	АР	199801005	Fall Chinook Acclimation Facilities on Snake/Clearwater Rivers	Nez Perce Tribe	Yes			\$773,472	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Implementation subject to Lower Snake Comp Review process and the hatchery effects evaluation process described in programmatic recommendation #4.
36	A	АР	200302300	Chief Joseph Hatchery Program	Colville Confederated Tribes	Yes		х	\$2,627,333	Art. Prod: effects and effectiveness monitoring	Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
37	A	АР	200708300	Grande Ronde Spring Chinook Salmon Supplementation Monitoring and Evaluation (M&E) on Catherine Creek/Upper Grande Ronde River	Umatilla Confederated Tribes (CTUIR)	Yes (Qualified)		х	\$207,430	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Implementation subject to Lower Snake Comp Review process and the hatchery effects evaluation process described in programmatic recommendation #4. ISRP qualifications to be addressed in geographc review.
38	A	АР	200713200	NEOH Monitoring & Evaluation Implementation (Formerly a component of 198805301)	Nez Perce Tribe	Yes			\$0	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
39	A	AP	200721200	Okanogan Basin Locally Adapted Steelhead Broodstock Step 1 and 2 (Casimer Bar)	Colville Confederated Tribes	No		Х	\$321,452	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process (see ISRP doc 2009-15): Sponsor to revise Step 1 Master Plan. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
40	A	АР	200740200	Snake River Sockeye Captive Propagation	Idaho Department of Fish and Game (IDFG)	Yes	Х		\$4,147,277	Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
41	A	AP	200740300	Spring Chinook Captive Propagation-Idaho	Idaho Department of Fish and Game (IDFG)	Yes	Х		\$303,750	Art. Prod: effects and effectiveness monitoring	Implement through FY 2014. Project is winding down. Bonneville to work with sponsors to complete a joint summary captive propagation report.

("B-List" projects included at the end for reference only)

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA	Programmatic Issues	Committee/Staff Recommendation
42	А	AP	200740400	Spring Chinook Captive Propagation-Oregon	Oregon Department Of Fish and Wildlife (ODFW)	Yes (Qualified)	Х		\$767,532	effectiveness monitoring	Implement through FY 2014. Project is winding down. To address ISRP qualifications, Bonneville will work with sponsors to complete a joint summary captive propagation report.
43	A	АР		Assess Reintroduction of Anadromous Fish in Burnt, Powder & Malheur Rivers	Umatilla Confederated Tribes (CTUIR)	In Part (Qualified)		Х	\$0		Do not implement. Reintroduction studies have already been performed as a part of the Hells Canyon relicensing process. Recommend implementation to be redirected within the Umatilla Accord for higher priority work.
44	A	АР	200900100	Expanded Multi-Species Acclimation in the Wenatchee/Methow Basins	Yakama Confederated Tribes	Yes (Qualified)		х	\$469,001	Art. Prod: effects and effectiveness monitoring	Implement with condition through FY 2016: Sponsor to address ISRP qualifications per April 14, 2009 Council decision.
45	A	АР	200900900	Basinwide Supplementation Evaluation	Columbia River Inter-Tribal Fish Commission (CRITFC)	Yes (Qualified)		х	\$870,348	Art. Prod: effects and effectiveness monitoring	Implement with condition through FY 2016 as per January 12, 2010 Council decision: Sponsor to address ISRP qualifications in contracting.
46	А	AP	201003800	Lolo Creek Permanent Weir Construction	Nez Perce Tribe	Yes (Qualified)	Х		\$0		Implement per April-May Council decision 2010 (fast-track). Constuction date is uncertain due to Wild and Scenic River designation.
47	А	АР	201005000	Evaluation of the Tucannon River Summer Steelhead Endemic Stock Hatchery Program	Washington Department of Fish and Wildlife (WDFW)	Yes (Qualified)	Х		\$179,056	Art. Prod: effects and effectiveness monitoring	Implement through FY 2016. Expansion and or continuation is dependent upon LSRCP review of Steelhead in 2011 and future step review. Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
48	А	АР		B-run Steelhead Supplementation Monitoring Proiect	Nez Perce Tribe, Idaho Department of Fish and Game	Yes	Х		\$572,674		Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
49	А	Chum	200871000	Development of an Integrated strategy for Chum Salmon Restoration in the tributaries below Bonneville Dam	Washington Department of Fish and Wildlife (WDFW)	In Part (Qualified)	Х		\$1,150,260		Implement with condition through FY 2016: Sponsor to address ISRP qualifications per August 12, 2009 Council decision.
50	А	Enforcem ent	200739000	Tribal Conservation Enforcement- Confederated Tribe of Umatilla Indian Reservation (CTUIR)	Umatilla Confederated Tribes (CTUIR)	Yes (Qualified)		Х	\$161,534		Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract.

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#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
51	A	Enforcem ent	200739100	Tribal Conservation Enforcement-Columbia River Inter-tribal Fish Commission (CRITFC)	Columbia River Inter-Tribal Fish Commission (CRITFC)	Yes		Х	\$484,601		Implement through FY 2016.
52	A	Enforcem ent	200810600	Tribal Conservation Enforcement-Colville Tribe	Colville Confederated Tribes	Yes (Qualified)		Х	\$141,439		Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract.
53	A	Genetics Salmon	200203000	Salmonid Progeny Markers	Umatilla Confederated Tribes (CTUIR)	Yes		Х	\$509,837	Coded Wire Tag, Research	Implement through 2014. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
54	Α	Genetics Salmon	ZOOXUO ZOO	Genetic Assessment of Columbia River Stocks	Columbia River Inter-Tribal Fish Commission (CRITFC)	Yes		Х	\$893,267	Art. Prod: effects and effectiveness monitoring	Implement through 2014. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
55	А	Genetics Salmon	200900500	Influence of Environment and Landscape on Salmonid Genetics	Columbia River Inter-Tribal Fish Commission (CRITFC)	No		х	\$150,765	Art. Prod: effects and effectiveness monitoring	Implement through 2014 per March 11, 2009 Council decision. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
56	А	Habitat Research	200725200	Multiscale Hyporheic Exchange	Umatilla Confederated Tribes (CTUIR)	Yes (Qualified)		х	\$151,697	Research	Implement with condition through FY 2014: Implementation beyond 2014 based on addressing ISRP qualification and Council review of the results report and recommendation of future work.
57	А	Harvest	200850800	Power Anlys Catch Samplg Rates	Columbia River Inter-Tribal Fish Commission (CRITFC)	Yes (Qualified)		Х	\$59,884		Implement with condition through FY 2016: Sponsor to address ISRP qualifications per July 14, 2010 Council decision.
58	А	Kelt	200740100	Kelt Reconditioning and Reproductive Success Evaluation Research	Columbia River Inter-Tribal Fish Commission (CRITFC)	No		Х	\$1,885,054	Research	Implement through 2014. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
59	А	Kelt		Steelhead Kelt Reconditioning	Yakama Confederated Tribes	No		х	\$595,484	Research	Implement through 2014 per January 12, 2010 Council decision. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
60	А	Monitoring	200723300	Distribution and Abundance Monitoring of Oncorhynchus mykiss within the Lower Clearwater Subbasin	Nez Perce Tribe	Yes (Qualified)			\$29,748		Implement through 2012 to close out. Implement to complete work and submit final report by June 1, 2012. Sponsor to address ISRP qualifications in final report.

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
61	A	Monitoring	200830600	Deschutes River Fall Chinook Research and Monitoring	Confederated Tribes Of Warm Springs	In Part (Qualified)		Х	\$215,000		Implement through 2016, per November 12, 2009 Council decision.
62	А	Monitoring		Deschutes River Sockeye Development	Confederated Tribes Of Warm Springs	In Part (Qualified)		Х	\$180,331	Art. Prod: effects and effectiveness monitoring	Implement through FY 2016 per August 18, 2010 Council decision.
63	A	Monitoring	200850300	Studies into Factors Limiting the Abundance of Okanagan and Wenatchee Sockeye Salmon	Columbia River Inter-Tribal Fish Commission (CRITFC)	Yes (Qualified)		х	\$226,731		Implement through FY 2016 per June 9, 2009 Council decision.
64	А	Nutrient	200733200	Mitigation of Marine-Derived Nutrient Loss in Central Idaho	Idaho Department of Fish and Game (IDFG)	Yes			\$0	Research	Do not implement. This project has completed its original objectives.
65	A	Nutrient	200847100	Upper Columbia Nutrient Supple	Yakama Confederated Tribes	In Part		х	\$218,609	Research	Implement with condition through FY 2014: Sponsor to address ISRP qualifications (as noted in May 12, 2010 Council decision). Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
66	A	Nutrient	200890400	Salmon River Basin Nutrient Enhancement	Shoshone-Bannock Tribes	Yes (Qualified)		х	\$269,223	Research	Implement with condition through FY 2014: Sponsor to address ISRP qualifications per January 12, 2010 Council decision. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
67	А	Passage	198331900	Development and Evaluation of Fish-Tracking Technologies (Title changed for Project 198331900 in 2006)	National Oceanic and Atmospheric Administration (NOAA)	Yes (Qualified)	х		\$620,535	Coordination, Pit Tag and other Tagging, Research	Implement with condition through FY 2014: Sponsor to address ISRP qualifications in 2012 contract. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work. See also presumptive path discussion in Programmatic Recommendation no. 10.
68	A	Passage	198712700	Smolt Monitoring by Non- Federal Entities	Pacific States Marine Fisheries Commission (PSMFC)	Yes (Qualified)	Х		\$2,520,475	Coordination	Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract.
69	A	Passage	198910700	Statistical Support For Salmonid Survival Studies	University of Washington	Yes	Х		\$276,824		Implement through FY 2016.

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#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
70	А	Passage	199008000	Columbia Basin PIT Tag Information System	Pacific States Marine Fisheries Commission (PSMFC)	Yes	х		\$2,640,469	Coordination, Pit Tag and other Tagging	Implement through FY 2016. See presumptive path discussion in Programmatic Recommendation no. 10.
71	А	Passage	199102800		National Oceanic and Atmospheric Administration (NOAA)	Yes (Qualified)	Х		% 4 / 1 11 / X	Coordination, Pit Tag and other Tagging	Implement through FY 2016. See presumptive path discussion in Programmatic Recommendation no. 10.
72	Α	Passage		Research, monitoring, and evaluation of emerging issues and measures to recover the Snake River fall Chinook salmon ESU	University of Idaho, US Fish and Wildlife Service (USFWS), US Geological Survey (USGS)	Yes	х		\$538,919	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Implementation based on outcome of Lower Snake Comp Review process and relationship to and a regional hatchery effects.
73	A	Passage	199105100	Modeling and Evaluation Statistical Support for Life- Cycle Studies	University of Washington	Yes	Х		\$418,366		Implement through FY 2016.
74	А	Passage	199302900	Survival Estimates for the Passage of Juvenile Salmonids Through Snake and Columbia River Dams and Reservoirs	National Oceanic and Atmospheric Administration (NOAA)	Yes	х		\$2,430,555	Pit Tag and other Tagging	Implement through FY 2016. See presumptive path discussion in Programmatic Recommendation no. 10.
75	А	Passage	199403300	Fish Passage Center	Pacific States Marine Fisheries Commission (PSMFC)	Yes (Qualified)	Х		\$1,459,109		Implement through FY 2016 with periodic ISAB reviews.
76	Α	Passage	199602000	Comparative Survival Study (CSS)	Columbia Basin Fish and Wildlife Authority (CBFWA), Pacific States Marine Fisheries Commission (PSMFC), US Fish and Wildlife Service (USFWS)	Yes (Qualified)	х		\$1,344,880	Pit Tag and other Tagging	Implement through FY 2016. See presumptive path discussion in Programmatic Recommendation no. 10.
77	А	Passage	199602100	Gas Bubble Disease Monitoring	US Geological Survey (USGS)	Yes	Х		\$0		Implement through FY 2016 under project number 198712700: Fish Passage Center (Smolt Monitoring Program).
78	Α	Passage	199900301	Evaluate Spawning of Fall Chinook and Chum Salmon Just Below the Four Lowermost Mainstem Dams	Oregon Department Of Fish and Wildlife (ODFW), Pacific Northwest National Laboratory (PNNL), Pacific States Marine Fisheries Commission (PSMFC)	Yes (Qualified)			\$73,052		Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract.

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
79	А	Passage	200100300	Installation and Evaluation of Established PIT-tag Technologies (Title changed for Project 200100300 in 2006)	National Oceanic and Atmospheric Administration (NOAA), Pacific States Marine Fisheries Commission (PSMFC)	Yes (Qualified)	х		\61161U	Coordination, Pit Tag and other Tagging	Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract. See presumptive path discussion in Programmatic Recommendation no. 10.
80	А	Passage	200203200	Snake River Fall Chinook Salmon Life History Investigations	Pacific Northwest National Laboratory (PNNL), University of Washington, US Fish and Wildlife Service (USFWS), US Geological Survey (USGS)	Yes	х		\$975,000	Art. Prod: effects and effectiveness monitoring	Implement with conditions through 2016: Implementation based on outcome of Lower Snake Comp Review process and relationship to and outcome of a regional hatchery effects evaluation process.
81	Α	Passage	200304100	Evaluate Delayed (Extra) Mortality Associated with Passage of Yearling Chinook Salmon through Snake River Dams	National Oceanic and Atmospheric Administration (NOAA)	Yes	Х		\$71,683	Pit Tag and other Tagging, Research	Implement through 2014. Project is winding down and will be complete in 2014. See presumptive path discussion in Programmatic Recommendation no. 10.
82	А	Passage	200500200	Lower Granite Dam Adult Trap Operations	National Oceanic and Atmospheric Administration (NOAA)	Yes	х		\$309,243		Implement through FY 2016.
83	А	Passage	200850600	Smolt Monitoring Video Feasibility Project	Columbia River Inter-Tribal Fish Commission (CRITFC)	No		Х	\$0		Close out. Project is complete and is closing out.
84	А	Passage	200851800	Upstream Migration Timing	Columbia River Inter-Tribal Fish Commission (CRITFC)	Yes (Qualified)		Х	\$296,145	Pit Tag and other Tagging	Implement with condition through FY 2016: Sponsor to address ISRP questions in 2012 contract. See presumptive path discussion in Programmatic Recommendation no. 10.
85	А	Passage	201007600	Characterizing migration and survival for juvenile Snake River sockeye salmon between the upper Salmon River basin and Lower Granite Dam	IDF&G, NOAA	In Part	х		\$399,995	Pit Tag and other Tagging	Implement objectives 1 and 2 through FY 2016. See presumptive path discussion in Programmatic Recommendation no. 10.
86	А	Predation invasives	199007700	Development of Systemwide Predator Control	Pacific States Marine Fisheries Commission (PSMFC)	Yes (Qualified)	Х		\$3,922,299		Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract.

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected	Programmatic Issues	Committee/Staff Recommendation
									Budget		
87	А	Predation - invasives	199702400	Avian Predation on Juvenile Salmonids	Oregon State University	Yes	Х		\$535,341	Research	Implement through FY 2016.
88	А	Predation - invasives	200727500	Impact of American Shad in the Columbia River	US Geological Survey (USGS)	Yes (Qualified)	Х		\$0	Research	Do not implement. The sponsors have completed the recommendation for original work in 2011.
89	A	Predation - invasives	200800400	Sea Lion Non-Lethal Hazing	Columbia River Inter-Tribal Fish Commission (CRITFC)	In Part (Qualified)		Х	\$277,060		Implement through FY 2016 per August 12, 2009 Council decision.
90	A	Predation - invasives	200871900	Research Non-Indigenous Actions	Oregon Department Of Fish and Wildlife (ODFW), US Geological Survey (USGS)	Yes (Qualified)	Х		\$353,150	Research	Implement through 2012 per July 14, 2010 Council decision. Implementation beyond 2012 based on ISRP and Council review of the results report and recommendation of future work.
91	A	RRS	200303900	Monitoring the reproductive success of naturally spawning hatchery and natural spring Chinook salmon in the Wenatchee River	National Oceanic and Atmospheric Administration (NOAA), Washington Department of Fish and Wildlife (WDFW)	Yes	Х		\$475,688	Art. Prod: effects and effectiveness monitoring, Research	Implement with condition through FY 2014: Implementation beyond 2014 based on ISRP and Council review of the results report and/or outcome of a regional hatchery effects evaluation process.
92	A	RRS	200305000	Evaluate the Reproductive Success of Wild and Hatchery Steelhead in Natural and Hatchery Environments	University of Washington	Yes	Х		\$0	Research	Implement through 2012 to close out. Implement to complete work and submit final report.
93	А	RRS	200305400	Evaluate the Relative Reproductive Success of Hatchery-Origin and Wild-Origin Steelhead Spawning Naturally in the Hood River	Oregon State University	Yes	Х		\$293,642	Art. Prod: effects and effectiveness monitoring, Research	Implement through FY 2014. Implementation beyond 2014 based on ISRP and Council review of the results report and/or outcome of a regional hatchery effects evaluation process.
94	A	RRS	200306300	Natural Reproductive Success and Demographic Effects of Hatchery-Origin Steelhead in Abernathy Creek, Washington	US Fish and Wildlife Service (USFWS)	Yes	Х		\$504,694	Art. Prod: effects and effectiveness monitoring, Research	Implement through FY 2014. Implementation beyond 2014 based on ISRP and Council review of the results report and/or outcome of a regional hatchery effects evaluation process.

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	ВіОр	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation
95	Α	RRS	200729900	Investigation of Relative Reproductive Success of Stray Hatchery & Wild Steelhead & Influence of Hatchery Strays on Productivity in the Deschutes	Oregon Department Of Fish and Wildlife (ODFW)	Yes (Qualified)	х			Art. Prod: effects and effectiveness monitoring, Research	Implement with condition through FY 2014: Sponsor to address ISRP qualifications within two years. Implementation beyond 2014 based on ISRP and Council review of qualification response.
96	A	RRS	201003300	Study Reproductive Success of Hatchery and Natural Origin Steelhead in the Methow	Washington Department of Fish and Wildlife (WDFW)	Yes	х		\$233,529	Research	Implement through 2014, per April-May 2010 Council decision for Fast Track projects: Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work.
97	Α	Umatilla	200820300	Assess Reintroduction of Steelhead in Butter, McKay & Willow Creeks	Umatilla Confederated Tribes (CTUIR)	In Part (Qualified)		Х	\$124,333		Implement objectives 1 and 2 through completion. Implementation for objective 3 based on outcome of ISRP and Council review of the reintroduction plan.
98	Α	Walla Walla	200003900	Walla Walla River Basin Monitoring and Evaluation (M&E)	Umatilla Confederated Tribes (CTUIR)	Yes		Х	\$856,259		Implement through FY 2016.
99	A	Water	200201301	Water Entity - Water Transaction Program	National Fish and Wildlife Foundation	Yes	х		\$4,266,178		Implement with condition through FY 2016: Sponsor to address ISRP qualifications in 2012 contract.
100	A		200810500	Selective Gear Deployment	Colville Confederated Tribes	Yes (Qualified)		Х	\$316,728		Implement with condition through FY 2016: Sponsor to address ISRP gualifications in 2012 contract.
									\$81,264,265		
102	В	АР	199506425	Policy, Plan and Technical Support of Washington Department of Fish and Wildlife (WDFW)-Yakima/Klickitat Fisheries Project (YKFP)	Washington Department of Fish and Wildlife (WDFW)	Yes (Qualified)					Defer decision to regional coordination review.
103	В	AP	200203100	Growth Modulation in Salmon Supplementation	National Oceanic and Atmospheric Administration (NOAA), University of Washington	Yes	Х			Art. Prod: effects and effectiveness monitoring, Research	Implement through 2014. Implementation beyond 2014 based on ISRP and Council review of the results report and recommendation of future work. [Need to talk with staff on priority]
104	В	AP	201008500	Columbia River Hatchery Effects Evaluation Team (CRHEET)	BPA, NOAA	Yes	Х			Art. Prod: effects and effectiveness monitoring	
105	В	CWT	198201301	Coded Wire Tag-Pacific States Marine Fisheries Commission (PSMFC)	Pacific States Marine Fisheries Commission (PSMFC)	Yes	Х			Coded Wire Tag, Coordination, Pit Tag and other Tagging	Council Decision Memo

#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	BiOp	Accord	FY12 BPA projected	Programmatic Issues	Committee/Staff Recommendation
106	В	CWT	198201302	Coded Wire Tag-Oregon Department of Fish and Wildlife (ODFW)	Oregon Department Of Fish and Wildlife (ODFW)	Yes	Х		Budget		
107	В	CWT	198201303	Coded Wire Tag-US Fish and Wildlife Service (USFWS)	US Fish and Wildlife Service (USFWS)	Yes (Qualified)	Х				
108	В	CWT	198201304	Coded Wire Tag-Washington Department of Fish and Wildlife (WDFW)	Washington Department of Fish and Wildlife (WDFW)	Yes (Qualified)	Х				
109	В	CWT	201003600	Lower Columbia Coded Wire Tag (CWT) Recovery Project	Washington Department of Fish and Wildlife (WDFW)	Yes	Х			Coded Wire Tag	Implement through FY 2016.
110	В	Estuary	200300700	Lower Columbia River Estuary Ecosystem Monitoring	Lower Columbia River Estuary Partnership (LCREP)	In Part (Qualified)	Х			Estuary	
111	В	Genetics Salmon	198909600	Genetic Monitoring and Evaluation (M&E) Program for Salmon and Steelhead	National Oceanic and Atmospheric Administration (NOAA)	Yes (Qualified)	Х			Art. Prod: effects and effectiveness monitoring, Project-specific issue, Research	
112	В	Genetics Salmon	201002600	Chinook and Steelhead Genotyping for Genetic Stock Identification (GSI) at Lower Granite Dam	Idaho Department of Fish and Game (IDFG)	Yes (Qualified)	X			Art. Prod: effects and effectiveness monitoring, Project-specific issue	
113	В	Genetics Salmon	201003100	Snake River Chinook and Steelhead Parental Based Tagging	Idaho Department of Fish and Game (IDFG)	Yes (Qualified)	Х				
114	I B	Habitat - Action Effectiven ess	199603501	Yakama Reservation Watershed Project	Yakama Confederated Tribes	Yes (Qualified)	Х	Х			
115	В	Habitat - Action Effectiven ess	199801900	Wind River Watershed	Underwood Conservation District (UCD), US Forest Service (USFS), US Geological Survey (USGS), Washington Department of Fish and Wildlife (WDFW)	Yes	х				
116	I B	Habitat - Action Effectiven ess	200205300	Asotin Creek Salmon Population Assessment	Washington Department of Fish and Wildlife (WDFW)	Yes	Х				

	(B-List projects included at the charton reference only)											
#	Task1	SubCat	ProjNum	Title	Sponsor	ISRPRec	BiOp	Accord	FY12 BPA projected Budget	Programmatic Issues	Committee/Staff Recommendation	
117	В	Habitat - Action Effectiven ess	200206800	Implementation of the Columbia Habitat Monitoring Program in Lolo Creek, SF Clearwater, Lochsa, and Imnaha Rivers - NPT DFRM Watershed Division	Nez Perce Tribe	No						
118	В	Habitat - Action Effectiven ess	200301700	Integrated Status and Effectiveness Monitoring Program (ISEMP)	National Oceanic and Atmospheric Administration (NOAA)	Yes (Qualified)	Х			Coordination, Pit Tag and other Tagging		
119		Habitat - Action Effectiven ess	200302200	Okanogan Basin Monitoring & Evaluation Program (OBMEP)	Colville Confederated Tribes	Yes (Qualified)	Х	Х				
120	В	Habitat - Action Effectiven ess	200900200	Status and Trend Annual Reporting	Yakama Confederated Tribes	Yes (Qualified)		Х		Habitat action effectiveness monitoring		
121	В	Habitat - Action Effectiven ess	200900400	Monitoring Recovery Trends in Key Spring Chinook Habitat Variables and Validation of Population Viability Indicators	Columbia River Inter-Tribal Fish Commission (CRITFC)	In Part		Х				
122	В	Habitat - Action Effectiven ess	201002800	Estimate Adult Steelhead Abundance in Small Streams Associated with Tucannon & Asotin Populations	Washington Department of Fish and Wildlife (WDFW)	Yes	Х					
123	В	Habitat - Action Effectiven ess	201003000	Project to provided VSP Estimates for Yakima Steelhead MPG	Yakama Confederated Tribes	Yes (Qualified)	Х					
124	В	Habitat - Action Effectiven ess	201003200	Imnaha River Steelhead Status Monitoring	Nez Perce Tribe	Yes	Х					

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125	В	Habitat - Action Effectiven ess	201003400	Upper Columbia Spring Chinook and Steelhead Juvenile and Adult Abundance, Productivity and Spatial Structure Monitoring	Washington Department of Fish and Wildlife (WDFW)	Yes (Qualified)	Х				
126	D	Habitat - Action Effectiven ess	201003500	Abundance, Productivity and Life History of Fifteenmile Creek Winter Steelhead	Oregon Department Of Fish and Wildlife (ODFW)	Yes	Х				
127		Habitat - Action Effectiven ess	201004200	Tucannon Steelhead and Spring Chinook Expanded Pit Tagging	Washington Department of Fish and Wildlife (WDFW)	Yes	Х				
128	В	Habitat - Action Effectiven ess	201005100	Upper Columbia Water Quality and Water Quantity Gauges	Cascadia Conservation District, Washington Department of Ecology	Yes (Qualified)	Х				
129	В	Habitat - Action Effectiven ess	201007500	Upper Columbia Implementation and Action Effectiveness Monitoring	Upper Columbia Salmon Recovery	Yes	Х				
130	R	Habitat - Action Effectiven ess	201008200	PNAMP Integrated Status and Trends Monitoring (ISTM) Demonstration Project	ODFW, Oregon State University, USGS, WDFW, Bioanalysts Inc, Lwr Columbia Fish Recovery Brd, WDOE	Yes					
131		Habitat Effectiven ess	200715600	Rock Creek Fish and Habitat Assessment	Yakama Confederated Tribes	No		Х		Project-specific issue	
132	В	Harvest	200206000	Nez Perce Harvest Monitoring on Snake and Clearwater Rivers	Nez Perce Tribe	Yes (Qualified)	Х				
133	В	Lamprey	199402600	Pacific Lamprey Research and Restoration Project	National Oceanic and Atmospheric Administration (NOAA), Umatilla Confederated Tribes (CTUIR)	Yes (Qualified)		Х	536,250	Lamprey, Research	Implement with conditions through FY 2014. Sponsor to address ISRP qualifications to produce a synthesis report as part of the final Tribal Pacific Lamprey Restoration Plan (see project # 200852400) for ISRP review in 2014. Implementation beyond 2014 based on ISRP and Council review.

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134	В	Lamprey	200201600	Evaluate the Status of Pacific Lamprey in the Lower Deschutes River	Confederated Tribes Of Warm Springs	Yes (Qualified)		Х	197,406	Lamprey	Implement with conditions through FY 2014. Sponsor to address ISRP qualifications to produce a synthesis report as part of the final Tribal Pacific Lamprey Restoration Plan (see project # 200852400) for ISRP review in 2014. Implementation beyond 2014 based on ISRP and Council review.
13!	В	Lamprey	200700700	Determine Status and Limiting Factors of Pacific Lamprey in Fifteenmile Creek and Hood River subbasins, Oregon	Confederated Tribes Of Warm Springs	Yes (Qualified)		Х	251,992	Lamprey	Implement through FY 2014 (per January 12 2010 Council decision). In addition, Sponsor to address ISRP programmatic qualifications to assist in producing a synthesis report as part of the final Tribal Pacific Lamprey Restoration Plan (see project # 200852400) for ISRP review in 2014. Implementation recommendation beyond 2014 based on ISRP and Council review
130	В	Lamprey	200830800	Willamette Falls Lamprey Escapement Estimate	Confederated Tribes Of Warm Springs	Yes (Qualified)		Х	180,284	Lamprey, Research	
13	В	Lamprey	200847000	Yakama Nation Ceded Lands Lamprey Evaluation and Restoration	Yakama Confederated Tribes	Yes (Qualified)		Х	209,223	Lamprey	Implement with conditions through FY 2014. Sponsor to address ISRP qualifications (as noted in April 14, 2009 Council decision) and assist in producing a synthesis report as part of the final Tribal Pacific Lamprey Restoration Plan (see project # 200852400) for ISRP review in 2014. Implementation beyond 2014 based on ISRP and Council review.
138	В	Lamprey	200852400	Implement Tribal Pacific Lamprey Restoration Plan	Columbia River Inter-Tribal Fish Commission (CRITFC)	In Part (Qualified)		Х	619,212	Lamprey	Implement through FY 2014 (per August 12, 2009 Council decision). In addition, Sponsor to address ISRP programmatic qualifications to produce a synthesis report, with other lamprey projects as part of the final Tribal Pacific Lamprey Restoration Plan for ISRP review in 2014. Implementation recommendation beyond 2014 based on ISRP and Council review
139	В	Monitoring	199801600		Oregon Department Of Fish and Wildlife (ODFW)	Yes (Qualified)	Х				
140	В	Ocean	199801400	Ocean Survival Of Salmonids	National Oceanic and Atmospheric Administration (NOAA)	Yes (Qualified)	Х			Ocean, Research	Implement through 2012 to complete coordinated synthesis report. Implementation beyond 2012 based on ISRP and Council review of the report and recommendation of future work.

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141	В	Ocean	200300900	Salmon Shelf Survival Study	Canada Department Of Fisheries and Oceans	Yes (Qualified)	Х			Ocean, Research	Implement through 2012 to complete coordinated synthesis report. Implementation beyond 2012 based on ISRP and Council review of the report and recommendation of future work.
142	В	Ocean	200311400	Pacific Ocean Survey Tracking (POST)	Kintama Research	Yes (Qualified)	Х		0	Ocean, Research	Implement through 2012 to complete coordinated synthesis report. Implementation beyond 2012 based on ISRP and Council review of the report and recommendation of future work.
143	В	Passage	199902000	Analyze the Persistence and Spatial Dynamics of Chinook Salmon	US Forest Service (USFS)	Yes (Qualified)					
144	В	Sturgeon	198605000	White Sturgeon Mitigation and Restoration in the Lower Columbia and Snake Rivers	Oregon Department Of Fish and Wildlife (ODFW)	Yes (Qualified)				White Sturgeon	
145	В	Sturgeon		Develop a Master Plan for a Rearing Facility to Enhance Selected Populations of White Sturgeon in the Columbia River Basin	Columbia River Inter-Tribal Fish Commission (CRITFC)	In Part (Qualified)		Х		White Sturgeon	
146	В	Sturgeon	200845500	Sturgeon Management	Yakama Confederated Tribes	Yes (Qualified)		Х		White Sturgeon	
147		Sturgeon		Sturgeon Genetics	Columbia River Inter-Tribal Fish Commission (CRITFC)	In Part		Х		White Sturgeon	
148	В	Umatilla	200901400	Biomonitoring of Fish Habitat Enhancement	Umatilla Confederated Tribes (CTUIR)	Yes (Qualified)		Х		Coordination, Habitat action effectiveness monitoring, Pit Tag and other Tagging	
149	NR	АР	199800704	Grande Ronde Spring Chinook on Lostine/Catherine Creek/ Upper Grande Ronde Rivers	Oregon Department Of Fish and Wildlife (ODFW)	Response requested	Х		212,016	Art. Prod: effects and effectiveness monitoring	
150	NR	AP	200003800	Walla Walla Hatchery Final Design/Construction	Umatilla Confederated Tribes (CTUIR)	No		Х		Art. Prod: effects and effectiveness monitoring	Implement through outcome of Step Review process. Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.

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151	NR	AP	//	Walla Walla Hatchery Plan and Preliminary Design – Expense	Umatilla Confederated Tribes (CTUIR)	N/A					Implement through outcome of Step Review process. Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
152	NR	AP	200003802	Walla Walla River Hatchery Operations and Maintenance (O&M)	Umatilla Confederated Tribes (CTUIR)	N/A					Implement through outcome of Step Review process. Implement with condition through 2016: Implementation subject to regional hatchery effects evaluation process described in programmatic recommendation #4.
153	NR	AP	200852700	John Day Reprogramming & Construction	Columbia River Inter-Tribal Fish Commission (CRITFC)	N/A		Х		Art. Prod: effects and effectiveness monitoring	Project implementationbased on outcome of review process.
154	NR	AP	700890200	Supplementation, Monitoring, and Evaluation Program	Shoshone-Bannock Tribes	N/A		Х		Art. Prod: effects and effectiveness monitoring	Project implementationbased on outcome of review process.
155	NR	AP	/UUAYUNUU	Crystal Springs Planning and Operations/Maintenance	Shoshone-Bannock Tribes	N/A		Х		Art. Prod: effects and effectiveness monitoring	Project implementationbased on outcome of review process.
156	NR	Habitat Research	200900800	Climate Change Impacts	Columbia River Inter-Tribal Fish Commission (CRITFC)	N/A		Х		Research	Project implementationbased on outcome of review process.
157	NR	Harvest	200850200	Expanded Tribal Catch Sampling	Columbia River Inter-Tribal Fish Commission (CRITFC)	N/A		Х			Project implementationbased on outcome of review process.
158	NR	Monitoring	200831100	Natural Production Management and Monitoring	Confederated Tribes Of Warm Springs	N/A		Х			Project implementationbased on outcome of review process.
159	NR	Passage		FCRPS Water Studies & Passage of Adult Salmon & Steelhead	Colville Confederated Tribes	N/A		Х			Project implementationbased on outcome of review process.