Northwest Power and Conservation Council Columbia River Basin Fish and Wildlife Program

Findings and Responses to Comments relating to the Council's decision to amend the Fish and Wildlife Program to add the Bitterroot River Subbasin Plan

September 2010 (document 2010-14)

Introduction

Under Section 4(h) of the Northwest Power Act, the Northwest Power and Conservation Council oversees the development, amendment, and implementation of a program to "protect, mitigate and enhance" fish and wildlife adversely affected by the development and operation of the hydroelectric facilities on the Columbia River and its tributaries, known as the *Columbia River Basin Fish and Wildlife Program*. The Council most recently amended the program in 2009. The current version is found on the Council's website at http://www.nwcouncil.org/library/2009/2009-09/Default.asp.

In the years 2002 to 2005, the Council led a planning effort to develop "subbasin plans" for the tributary subbasins of the Columbia basin, containing specific objectives and measures for the program at the subbasin level. The effort culminated in 2004-05 as the Council amended into the Fish and Wildlife Program the management plan elements of the subbasin plans for nearly all of the Columbia's tributaries. http://www.nwcouncil.org/fw/subbasinplanning/Default.htm.

Planners in a handful of tributaries did not complete subbasin plans at that time. The Council left open the possibility of further amending the program if subbasin plans came in at a later date, and has continued to support in the Fish and Wildlife Program the development of subbasin plans for tributaries still without plans.

In September 2009, the Council received a proposed subbasin plan for the Bitterroot River subbasin in Montana, which may be found at http://www.nwcouncil.org/fw/subbasinplanning/bb.htm. The Montana Water Trust acted as lead planning entity for the Bitterroot plan, working with more than a dozen governmental agencies and non-governmental organizations as partners and coordinating and consulting with many more. The planning team recommended the Bitterroot subbasin plan for adoption into the Council's Fish and Wildlife Program.

At this time, in September 2010, the Council is adopting the management plan elements of the Bitterroot River Subbasin Plan into the Council's Fish and Wildlife Program. This document explains the Council's disposition of the Bitterroot subbasin plan recommendation, and also explains how the Council responded to the public comments it received on the recommended program amendment. Note that the Council's subbasin plan decision in 2005 included a lengthy discussion of the Council' subbasin planning effort, the purpose and structure of subbasin plans, the legal requirements for amending the Council's Fish and Wildlife Program, required findings on the recommended subbasin plans, and responses to comments on the proposed amendments. Subbasin Plan Amendments Findings and Response to Comments,

http://www.nwcouncil.org/library/2005/2005-13.pdf. The 2005 decision document is incorporated

here by reference, and its detail will not be repeated here. This subbasin plan decision document should be considered a supplement to the earlier decision document. Both decision documents are formally part of the Fish and Wildlife Program along with subbasin plans themselves.

Amendment Process and Decision

In September 2009, the Council received proposed subbasin plans for the Bitterroot and the Blackfoot rivers in Montana for consideration as possible program amendments. As noted above, the Montana Water Trust acted as lead planning entity for the Bitterroot plan. Trout Unlimited performed the same role for the Blackfoot plan. Both lead entities worked with governmental agencies and non-governmental organizations as planning partners, and coordinating and consulting with many more. The Bitterroot and Blackfoot subbasin plans as proposed may be found at http://www.nwcouncil.org/fw/subbasinplanning/bb.htm.

Under Section 4(h) of the Northwest Power Act, Fish and Wildlife Program amendment processes ordinarily begin with the Council sending a written request for program amendment recommendations to state and federal fish and wildlife agencies, Indian tribes, and others, allowing at least 90 days for a response. The Power Act also requires the Council to allow an opportunity for review and comment on recommended amendments. The Council decided to consider the proposed Bitterroot and Blackfoot subbasin plans as formal "recommendations" for program amendments, as that term is used in Section 4(h). It was thus incumbent on the Council to provide written notice and allow an opportunity for review and comment on those recommendations, and also to allow others an opportunity to submit formal amendment "recommendations," too, if so desired. On that basis, in November 2009, the Council provided the following written notice required under the Power Act (see http://www.nwcouncil.org/fw/subbasinplanning/bb.htm):

In September 2009, the Council received subbasin plans for the Bitterroot and Blackfoot subbasins as recommended amendments to the Council's Columbia River Basin Fish and Wildlife Program. Montana Water Trust recommended the Bitterroot subbasin plan. Trout Unlimited recommended the Blackfoot plan.

The Council now proposes to amend the Fish and Wildlife Program to incorporate the management plan portions of the recommended subbasin plans for the Bitterroot and Blackfoot subbasins.

For the next 90 days, the Council welcomes comments on these two plans and the ISRP's review of the plans. The Council hopes to focus comments on the proposed plans as recommended and on the idea of incorporating them into the program. But you are also free under Section 4(h) of the Northwest Power Act to recommend alternative provisions for these two subbasin plans or even an entirely different subbasin plan for these two subbasins. Additional information about the requirements for subbasin plans can be found in Part VI of the Council's 2009 Fish and Wildlife Program, (www.nwcouncil.org/library/2009/2009-02.htm) and at the Subbasin Planning page (www.nwcouncil.org/fw/subbasinplanning).

Comments or recommendations related to the proposed subbasin plans for the Bitterroot and Blackfoot subbasins must be submitted to the Council by February 11, 2010, to ensure consideration by the Council.

Thus February 11, 2010, was the closing date for receipt of "recommendations" relating to the Bitterroot and Blackfoot subbasins. The Council did not receive any competing program amendment recommendations for either the Bitterroot and Blackfoot subbasins. Thus there was no reason to seek further public review and comment on competing recommendations.

The Council did receive a handful of written comments on the proposed Bitterroot subbasin plan, found at http://www.nwcouncil.org/fw/subbasinplanning/bb.htm. The Council also received oral comments on the proposed Bitterroot subbasin plan amendment during a public hearing held in Missoula, Montana, on June 9, 2010. Most of the comments raised legal issues for the Council to consider in its deliberations. Comments from the U.S. Fish and Wildlife Service on the proposed Bitterroot plan in particular required consideration and response from the planners for the Bitterroot. The Council received that response from the Bitterroot Subbasin Planning Team in March 2010.

As noted in the public notice, the Council also asked its Independent Scientific Review Panel (ISRP) to review both of the proposed subbasin plans for scientific soundness, as it did with all the previous subbasin plans. The ISRP reviewed the subbasin plans and met with the planners from each subbasin for presentations and a tour. The Panel released its review report on the proposed Bitterroot and Blackfoot subbasin plans late in November 2009. The Panel commented favorably on the Bitterroot plan, while it had concerns about the scientific soundness of the proposed Blackfoot plan. http://www.nwcouncil.org/library/isrp/isrp2009-46.pdf. The Council released the ISRP report for public review and comment as well, including any responses that might be necessary or desired from the lead planning entities. Trout Unlimited, the lead entity for the Blackfoot plan, did provide the Council with a written response to the ISRP's review in February 2010, found at http://www.nwcouncil.org/library/isrp/isrp2009-46.htm. The Council did not receive comment on the ISRP's review of the Bitterroot plan.

Based on the ISRP review comments on the Blackfoot Subbasin Plan, the Council is deferring final consideration of that subbasin plan. This will allow the Blackfoot subbasin planners more time to finish a complete plan for the Council's consideration.

On the other hand, after full review and consideration of the recommendations, the public comments, and the other material in the administrative record, the Council is adopting the management plan elements of the Bitterroot River Subbasin Plan as part of the Fish and Wildlife Program. The Council adopts the Bitterroot plan consistent with and under the same terms as the Council's adoption of the management plan elements of the other subbasin plans. *See* http://www.nwcouncil.org/library/2005/2005-13.pdf (2005 subbasin plan amendments findings and response to comments); *see also* http://www.nwcouncil.org/library/2009/2009-09.pdf at 3-5, 57 (2009 Fish and Wildlife Program provisions describing role of subbasin plans) and http://www.nwcouncil.org/library/2009/2009-09/2009-09F.pdf at 3-5, 193-202 (discussion of role of subbasin plans in findings and response to comments on 2009 program amendments).

Because the Council is adopting the Bitterroot subbasin plan as recommended, there is no need here to provide the type of written findings required under Section 4(h)(7) of the Northwest Power Act when the Council decides *not* to adopt a program amendment recommendation as recommended. The following section does respond to the comments the Council received on the proposed Bitterroot subbasin plan.

Response to Comments on the Bitterroot River Subbasin Plan as Proposed for Adoption into the Council's Fish and Wildlife Program

Independent Scientific Review Panel

The Council considered the ISRP's report to be a comment on the proposed Blackfoot subbasin plan, albeit a "comment" generated through a review requested by the Council under highly structured premises. The Council asked the ISRP to evaluate subbasin plans for consistency with the Fish and Wildlife Program, especially with the Scientific Principles in the program, by using a list of review questions developed by the Council to help the Panel and the Council to determine the scientific soundness of subbasin plans. To complete the reviews, the ISRP itself created a review checklist derived from the Council's Subbasin Planning Technical guide and the review questions developed by the Council. The ISRP used the same checklist and review approach for the Bitterroot plan review as it did for all the plans in 2004. As part of this review, the ISRP also met with planners for presentations and a tour of the subbasin in October 2009.

As described in the 2005 subbasin plan findings and response to comments, the Council has been particularly interested in the ISRP's views on the soundness of the technical assessment underneath whatever subbasin plan is on review (that is, the data and information on population status for the focal species and on the identification of habitat conditions supporting or limiting the productivity of these species) and then on well the management plan links priority objectives and strategies to protecting productive habitat and addressing the limiting factors identified in the technical assessments. These factors became a fundamental dividing point for Council consideration of proposed subbasin plans. That is, if the ISRP found a proposed subbasin plans to have an inadequate technical assessment or to lack the appropriate linkage of priority objectives and strategies to the assessments, the Council deferred consideration of the plan for program adoption until the planners could improve the plan in response. Only if the ISRP had a largely favorable view of a plan's technical assessment and management plan "linkage" did the Council move those plans into a track for further consideration as program amendments. *See*

http://www.nwcouncil.org/library/2005/2005-13.pdf, pp. 8, 12-13, 15-16, 38-39, 53 (discussion and treatment of proposed subbasin plans based in large part on the ISRP's comments regarding the adequacy of technical assessments and the appropriate "linkage" of priority objectives and strategies in he management plans to the technical assessments).

As highlighted above, the ISRP reported favorably on the Bitterroot plan, noting that the plan was well prepared with attention to the eight principles of the Fish and Wildlife program's scientific foundation and the subbasin planning guide, and fundamentally sound in the core elements of the technical assessment and the linkage of the management plan to the assessment.

With regard to the technical assessment, the plan sufficiently summarized the environmental characteristics of the Bitterroot River and clearly described the status of the key habitat attributes and focal species. The assessments reflected a wealth of available information and a thorough and adequate overview of the subbasin, meeting the target in the geographical, demographical, and environmental context. In discussions with the planners, the ISRP noted room for improvement, especially regarding the assessment of how environmental conditions might be affected in the future by human population growth and climate change. The planners are aware of the issues associated with future conditions, in particularly in light of the impacts of population growth and climate change in the Bitterroot Valley, and will be working to factor in these uncertainties in the future.

As for the management plan, the ISRP noted that the plan described a vision and scientific foundation consistent with the Council's Fish and Wildlife Program, and objectives and strategies that provide the necessary foundation for improving the status of habitats and population characteristics for focal species as identified in the technical assessment. The ISRP noted a lack of specific detail in certain areas, although not a material problem. One specific weakness mentioned was a lack of detail about instream water rights and how effective the management tools might be for acquiring "new" in-channel water might be. The ISRP had also discussed this matter with the planners during the presentation in October. The Council notes that the Bitterroot planners are active participants in the Council's Water Transaction Program and are involved in water transactions in the Bitterroot on a regular basis, and so should be able to handle this in implementation.

The ISRP noted a few other ways the plan could be improved in the future, including the monitoring and evaluation elements. The Panel noted that, in common with even the other fundamentally sound plans in the 2004 review, the Bitterroot plan lacked empirical data and quantified goals in many areas, as well as a well-defined process from which planners can assess effectiveness of management actions. The Bitterroot planners acknowledged the need to further develop the monitoring and evaluation elements and will continue to work on them. The Panel's critique of the monitoring and evaluation elements of the Bitterroot plan was the same as the Panel's criticism of nearly all the plans developed in 2004-05 as well, an issue the Council largely decided to treat not by immediate revisions to individual plans but through the ongoing efforts at improving the regional monitoring and evaluation framework. http://www.nwcouncil.org/library/2005/2005-13.pdf, 8, 11-12.

The ISRP concluded that the Bitterroot River Subbasin Plan would serve as an important and useful planning tool for several years, and described a solid history and plausible future of partners working together to improve ecosystem function for the focal species through habitat restoration projects. Based on the ISRP's report and its own review, the Council concluded that the Bitterroot plan satisfied the requirements for subbasin plans in the Fish and Wildlife Program consistent with the Council's review of and decisions on the earlier subbasin plans.

Clark Fork Coalition Confederated Salish & Kootenai Tribes

The Council received two comments at its public hearing in Montana largely favorable to the proposed Bitterroot subbasin plan. Barbara Hall of the Clark Fork Coalition urged the Council to adopt the Bitterroot plan into the Fish and Wildlife Program, thanking the Council for allowing the plans to go forward outside the Council's regular subbasin planning process in 2004-05.

Lynn Ducharme of the staff of the Confederated Salish & Kootenai Tribes commented that while not perfect, the Bitterroot subbasin plan should be of help in improving conditions for bull trout, a significant cultural species for the tribes. The Tribes would be looking for opportunities to implement measures in the plan as mitigation for adverse effects of the hydrosystem on bull trout.

U.S. Fish and Wildlife Service, Montana Ecological Services Field Office

The Fish and Wildlife Service's Montana Ecological Services Field Office (Ecological Services Office) commended the proposed Bitterroot plan as well-written; commented that it would serve as a useful platform for further planning and implementation in the subbasin; noted favorably that the proposed subbasin plan does recognize to a certain extent the importance of restoring historical connectivity for bull trout populations in the Bitterroot River core area; and supported in general the plan's prioritization of bull trout and westslope cutthroat trout as aquatic focal species and the plan's Aquatic Working Hypothesis, Vision and Objectives.

At the same time, the Ecological Services Office criticized the Bitterroot planners for developing the plan without direct contact, review, or involvement of the Fish and Wildlife Service's bull trout recovery program. As a result, the proposed subbasin plan significantly understated the importance of the listed status of bull trout as threatened under the Endangered Species Act; failed to fully recognize the existing science provided in the Draft Bull Trout Recovery Plan; inaccurately stated that no critical habitat had been designated for bull trout in the basin; failed to capture completely all of the ongoing bull trout work in the subbasin, and needed to fully integrate the Service's draft recovery plan. The Ecological Services Office continued that the subbasin plan's Guiding Principles and the bull trout objectives and management strategies were little more than broad ecological platitudes that could apply to any stream, anywhere in the range of bull trout, and thus the plan needed substantially more fine-tuning, including in the list of specific "Near Term Opportunities" and identification of locally meaningful data gaps, before the subbasin plan could make a meaningful contribution in directing projects to assist bull trout.

Given the nature of the comments, the Council asked the Bitterroot planners to investigate and respond. The Bitterroot Subbasin Planning Team submitted a lengthy response in March 2010. The planners noted that they did coordinate directly with Fish and Wildlife Service personnel working at the Lee Metcalf National Wildlife Refuge, who were directly involved in the development of the terrestrial portion of the subbasin plan, and also that the Bitterroot planners coordinated with *all* of the fisheries biologists working in the subbasin, many of whom work or coordinate regularly with the Fish and Wildlife Service and work on bull trout under the guidance of the Endangered Species Act programs. Even so, the planners noted that the failure to coordinate directly with the Ecological

Services Office and its bull trout recovery program was a significant oversight. To begin repairing that oversight, the Bitterroot contacted the Ecological Services Office and began a set of discussions on ways to integrate more closely subbasin planning and implementation under the Council's Program and the Northwest Power Act with the Service's bull trout recovery planning effort under the ESA. According to the Bitterroot planners, the Ecological Services Office responded favorably and agreed to participate with the Bitterroot team as appropriate during implementation.

As for the substantive criticisms in the Ecological Services Office's comments, the Bitterroot planners documented that the bull trout data and science in the subbasin plan is drawn from the same agencies performing similar functions under the bull trout recovery effort, and represents the best available science as of 2009, an advancement in information over the 2002 draft recovery plan. The Bitterroot planners also noted that they did in fact rely heavily upon the Service's Draft Bull Trout Recovery Plan in developing the subbasin plan's management plan, regretting their failure to be more clear about that fact in the plan itself. It was the view of the planners, after again reviewing and comparing the subbasin plan and the draft recovery plan, that:

[w]e feel the bull trout aquatic objectives and aquatic management strategies included in the Management Plan (Tables 3.3 through 3.6) are consistent with the Recovery Objectives and Recovery Criteria described in the Recovery Plan for the Clark Fork River Recovery Unit (the Bitterroot is included in the Upper Clark Fork Recovery Subunit). In some instances, the Aquatic Committee, consisting of fisheries managers and researches, adopted language directly from the Recovery Plan (i.e Bull Trout Objective BT3 'Achieve an overall bull trout population trend that is accepted to be stable or increased based on at last 10 years of monitoring data'). In other cases, the Aquatic Committee felt the recovery criteria were too specific or unachievable for the period covered by the Subbasin Plan (10-15 years) (for example, total adult abundance criteria of exceeding 1,000 fish in the Bitterroot Core Area). The Recovery Strategies, and priority subwatersheds for those strategies, included in the Recovery Plan for the Upper Clark Fork Recovery Subunit were incorporated into the Plan as aquatic management strategies where it was determined that the strategies were still applicable (Table 3.18 of the Management Plan).

Subbasin Planners agree that a loss of connectivity between populations within the subbasin and to the larger Clark Fork River system is a primary cause of bull trout decline in the Bitterroot Subbasin and indicate this in Section 2.12.2 of the Assessment. We also agree that removal of dams on the mainstem Clark Fork River is key to the recovery of bull trout. As described in detail in the Plan, the fluvial population of bull trout is greatly reduced in the Bitterroot River Subbasin. Planners acknowledge that restored connectivity with other subbasins in the Clark Fork River basin is key to long-term recovery of fluvial bull trout in the Bitterroot River Subbasin. However, the Subbasin Plan focuses on a 10-15 year planning period. There are a number of factors that continue to limit connection of fluvial bull trout in the Bitterroot River with bull trout in the Clark Fork River, primarily water temperature and degraded habitat, that the subbasin planners felt could not be adequately addressed in the current planning period covered by the Subbasin Plan. For this reason, it may have appeared that this issue did not receive as much direct attention as other issues.

In addition to the Draft Bull Trout Recovery Plan, the Plan also incorporated the following sources, all of which were developed to be support or be consistent with the ESA and Draft Bull Trout Recovery Plan.

- Restoration Plan for bull trout in the Clark Fork River basin and Kootenai River basin, Montana (Montana Bull Trout Restoration Team, 2000)
- Bitterroot River drainage bull trout status report (Montana Bull Trout Scientific Group, 1995)
- Comprehensive fish and wildlife conservation strategy (Montana Department of Fish, Wildlife and Parks, 2005)
- Bitterroot National Forest monitoring and evaluation reports (Bitterroot National Forest, 2006-2008)
- Aquatic Multi-Scale Assessment and Planning Framework for the Bitterroot National Forest (Bitterroot National Forest, 2006)
- Aquatic Multi-Scale Assessment and Planning Framework for the Lolo National Forest (Lolo National Forest, 2006)
- Bull Trout Critical Habitat Final Rule (U.S. Fish and Wildlife Service, 2005)
- Bitterroot River Headwaters TMDL (DEQ, 2005)
- Lolo Creek TMDL (DEQ, 2003)

The Bitterroot planners had similarly helpful response to the criticisms about the management plan principles and strategies for bull trout:

The Guiding Principles, development of criteria for subwatershed prioritization, aquatic objectives, and aquatic management strategies for bull trout were developed by the fisheries managers and researches working in the Bitterroot Subbasin through participation on the Aquatic committee. These pieces of the Management Plan were developed specifically to address limiting factors to focal species in the Bitterroot Subbasin with a 10-15 year planning timeframe in mind. The Subbasin Plan is not meant to be a comprehensive recovery document for bull trout in the Bitterroot Subbasin.

Bitterroot Subbasin Planners agree with FWS that substantial more fine-tuning of the framework provided in the Management Plan is needed for it to be a useful tool to implement aquatic management strategies in the Subbasin. The development of a detailed prioritization of aquatic management strategies within prioritized subwatersheds was outside of the scope of the current planning process. The decision pathways included in section 5.3 of the Management Plan (Figure 5.2 and 5.3) provide some detail on how we hope to begin implementing the Subbasin Plan. The Subbasin Planners look forward to working with NWPCC, FWS and other partners in moving forward with implementation of the Bitterroot Subbasin Plan.

The Proposed Rule for Bull Trout Critical Habitat was released after the Subbasin Plan was finalized and therefore it was not possible for Subbasin Planners to integrate the proposed revised critical habitat into the Plan. The only water bodies included in the Proposed Rule for bull trout critical habitat designation that were not identified by

Subbasin Planners as either 'Active Restoration' or 'Conservation' are Fred Burr Creek and the mainstem Bitterroot River downstream of Hamilton, Montana. These were not included in the Plan as prioritized subwatersheds because they did not meet the criteria presented in Table 3.16 of the Management Plan. The other 36 water bodies identified in the Proposed Rule are included as either 'Conservation' or 'Active Restoration' subwatersheds in the Management Plan and therefore the focus of the Management Plan's 10-15 year timeframe. In light of the Proposed Rule for a revisions to bull trout critical habitat designation, Subbasin Planners will solicit feedback from FWS on how best to coordinate our implementation and data collection efforts with theirs.

We also view the management plan as a worthwhile platform from which to build and agree that it lacks specificity to assist with making specific management decisions. We feel that the Management Plan provides us with a set of prioritized sub-watersheds and aquatic management strategies and the next step is to determine specific on-the-ground projects within priority subwatersheds.

The decision pathways included in section 5.3 of the Management Plan (Figure 5.2 and 5.3) provide some detail on how we hope to begin this implementation phase of the Subbasin Plan. The Subbasin Planners look forward to working with NWPCC, FWS and other partners in implementation of the Bitterroot Subbasin Plan.

Upon review of the ISRP's report of the Bitterroot Plan and the Bitterroot planning team's response to the Ecological Services Office, the Council is comfortable that the plan's technical assessment of bull trout conditions in the Bitterroot basin is more than sufficient, that the aquatic management strategies and objectives are at the appropriate level of detail as compared to other subbasin plans in the program, and that the level of coordination in the development of the plan was appropriate, even if the planners should have directly coordinated with the Fish and Wildlife Service's bull trout recovery program personnel. The Ecological Services Office's comment letter, and the communication and coordination it has sparked, should serve to link these two efforts in the appropriate way as management strategies are refined into specific implementation actions.

Skamania PUD Salmon River Electric Cooperative Charles Pace

These three commenters had similar concerns about the Council's proposal to adopt the Bitterroot subbasin plan into the Fish and Wildlife Program, summarized as follows:

Skamania PUD

• Comment objected to residents of Skamania County paying for wildlife protection or environmental repair of damage not caused by construction of the federal hydrosystem. The problems in the Bitterroot Valley would be present even if none of the existing dams on the Columbia, Snake, Kootenai, or other drainage rivers had been built.

Salmon River Electric Cooperative

• Comment opposed the Council adopting the Bitterroot Subbasin Management Plan where neither the proposed plan, nor any other subbasin management plan adopted by the Council, meets the requirements of the Northwest Power Act. The comment opposed directing Bonneville funding to projects that use ratepayer dollars for fish and wildlife programs that have no direct impact on fish species in the Columbia River Basin that are impacted by the federal hydrosystem. The comment urged the Council to stop directing Bonneville funding to those projects and instead to concentrate on the intent of the Power Act.

Charles Pace (written comments and oral testimony)

• Comment objected to adopting the Bitterroot plan which could result in BPA paying for projects in that subbasin where there are no hydroelectric projects. The subbasin plan assessment does not indicate that populations of bull trout or any other sensitive species of fish, wildlife or plants have suffered any adverse impacts of hydroelectric projects. With the exception of fish and wildlife losses attributable to transmission lines and distribution facilities, which the subbasin plan does not address, ratepayers have no responsibility for protecting/enhancing fish and wildlife populations or for mitigating for environmental damages associated with non-hydro human impacts. Adverse impacts to fish and wildlife in the Bitterroot subbasin result from water diversions for agriculture, forest management practices, mining, and urbanization.

The Council appreciates the concerns, but these comments misunderstand the nature of offsite mitigation under the Northwest Power Act and the role of subbasin plans under the Council's Fish and Wildlife program. The Council has already responded to similar comments during the earlier subbasin planning effort and during the 2009 Fish and Wildlife Program amendments. *See* 2005 Subbasin Plan Amendments, Findings and Response to Comments, http://www.nwcouncil.org/library/2005/2005-13.pdf, 36-37, 66-67; 2009 Fish and Wildlife Program, http://www.nwcouncil.org/library/2009/2009-09.pdf, 7; 2009 Fish and Wildlife Program Amendments, Findings and Response to Comments, <a href="http://www.nwcouncil.org/library/2009/2009-09/20

Under the Northwest Power Act, the Council is to develop a program to protect, mitigate and enhance the adverse effects of the Columbia hydroelectric facilities on fish and wildlife. The Council's Fish and Wildlife Program must address the effects of all the Columbia hydroprojects, including the non-federal and not just the federal projects.

Ratepaying consumers of Columbia hydropower are responsible for funding protection and mitigation actions to address the adverse effects of the Columbia hydrosystem only. The Council develops the Fish and Wildlife Program adhering firmly to that principle. The Council also recognizes that the hydroelectric power system is only one factor in the loss of fish and wildlife in the Columbia River Basin.

The Council's program thus includes measures that directly address the impacts of the hydrosystem on fish and wildlife. The program also includes measures that address limiting factors not caused by

the hydrosystem, as the Northwest Power Act authorizes the program to contain, and Bonneville and others to fund, *off-site protection and mitigation measures* to compensate for losses arising from the development and operation of the Columbia hydrosystem. *All* off-site mitigation in every subbasin by definition addresses problems not caused by the hydrosystem. The "nexus" to the hydrosystem that allows a measure to be an appropriate part of the program is whether the measure will provide protection or mitigation benefits for fish or wildlife adversely affected by the hydrosystem, benefits that can be said to compensate for effects not already mitigated.

Thus by necessity the Council's Fish and Wildlife Program needed an assessment of the broad opportunities available to obtain cost-effective offsite mitigation for both fish and wildlife, especially in coordination with the mitigation efforts of others, and also to understand the threats to the affected species from factors outside the program that could undermine the ratepayer mitigation investment. The purpose of all the subbasin plans has been to provide that broad inventory of possible mitigation measures for species affected by the hydrosystem. The Council has been careful not to equate the totality of the offsite mitigation opportunities in the subbasin plans with the hydrosystem mitigation obligation -- the Council agrees that these are different concepts. The subbasin plans were intentionally crafted to identify all possible limiting factors that could be addressed to provide opportunities for offsite mitigation activities under the program for species affected by the system, not to precisely size the hydrosystem's offsite mitigation obligation. The Council did not ask the subbasin planners to determine the size of the hydrosystem mitigation obligation or determine at what aggregate point implementing the strategies in the subbasin plan would or could exceed the hydrosystem's mitigation obligation for hydrosystem effects. This cannot be assessed at the subbasin level, at least not at first, as it is instead a programmatic matter in the hands of the Council and Bonneville.

These principles apply to bull trout. Bull trout have been and continue to be adversely affected by the hydroelectric facilities in the Columbia basin, federal and non-federal, mainstem and tributary. Bull trout protection and mitigation activities are properly part of the Council's Fish and Wildlife Program. Bull trout protection and mitigation cannot take place solely through measures that directly address problems at the dams – the adverse effects of the dams on bull trout are too significant to be resolved just at the dams with the dams still in place. The precise extent of the remaining bull trout mitigation obligation, to be addressed through off-site mitigation, has not been quantified, but it exists. Thus the Act authorizes and indeed the program must contain off-site mitigation measures for bull trout if it is to compensate for losses to bull trout arising from the development and operation of the hydroelectric facilities of the Columbia River and its tributaries.

Bull trout populations in the upper Columbia in particular have been adversely affected by the hydrosystem, and so it is appropriate to ask the subbasin planners in upper Columbia tributaries, including the Bitterroot, to identify mitigation opportunities to compensate. Those offsite mitigation opportunities will by definition address and remedy problems not caused by the hydrosystem. Yet the Council remains careful not to equate the totality of the offsite mitigation opportunities for bull trout identified in this subbasin plans with the hydrosystem mitigation obligation. Whether any particular bull trout mitigation measures in this subbasin plan are implemented under the program will depend on the extent to which the proposed action can be shown to be able to improve bull trout survival and productivity and boost bull trout numbers to an extent not yet fully addressed and compensated for in other hydrosystem mitigation activities, direct and off-site.