

NOAA Fisheries

2003 Implementation Progress Evaluation Report

1. INTRODUCTION

In December 2000, the National Marine Fisheries Service (NOAA Fisheries) issued to the U.S. Army Corps of Engineers (Corps), Bonneville Power Administration (BPA), and U.S. Bureau of Reclamation (USBR) (collectively, the “Action Agencies”) a Biological Opinion regarding operation of the Federal Columbia River Power System (FCRPS). The Biological Opinion includes a reasonable and prudent alternative (RPA) to avoid jeopardizing salmon and steelhead species listed under the Endangered Species Act (ESA). The RPA consists of a combination of hydro actions to improve survival within the FCRPS and offsite mitigation actions to improve survival in other life stages.

The RPA includes a risk management process to ensure that “required measures are implemented and effective.” Mid-point implementation progress evaluations are specified for the third, fifth, and eighth years of the 10-year biological opinion. At each evaluation, NOAA Fisheries and the Action Agencies have the opportunity to confirm that implementation is proceeding as expected, modify the direction of implementation if necessary, or determine that the fundamental approach in the RPA is not working before it is too late to implement alternative approaches. The 2003 evaluation is primarily concerned with programmatic performance standards related to implementation of the RPA measures, while the 2005 and 2008 evaluations increasingly emphasize progress to biological performance standards. In particular, the 2003 “check-in” evaluates the early implementation of hydro, offsite mitigation, and research, monitoring, and evaluation (RM&E) measures that are important for providing near-term survival improvements, planning for future survival improvements, and providing the research and monitoring necessary to assess progress. Details regarding NOAA’s expectations in December 2000 for progress through 2003 were included in Appendix F of the Biological Opinion for many key actions in the RPA.

To facilitate the 2003 implementation progress evaluation, the Action Agencies prepared an “Endangered Species Act 2003 Check-In Report for the Federal Columbia River Power System” (http://www.salmonrecovery.gov/Progress_Report.pdf; hereinafter, “Check-In Report”). This report addresses seven questions, which are defined in Section 9.5.2.2 of the Biological Opinion, that inform the 2003 implementation evaluation. The Action Agencies reached a conclusion for each of the seven questions and then concluded that, overall, implementation is “on track” (Check-In Report, p. 19).

The purpose of this document, as specified on p. 9-43 of the Biological Opinion, is for the NOAA Fisheries to review the Action Agencies' conclusions for each of the seven questions in Section 9.5.2.2 and then "determine whether, *on balance*, the Action Agencies' implementation of the RPA is substantially meeting expectations (green zone); not meeting expectations, but capable of timely restoration within current authority (yellow zone); or failing, although possibly rectifiable with additional authority (red zone)" (emphasis added). Guidance regarding the main considerations for NOAA Fisheries' determination is provided on pages 9-42 and 9-43 of the Biological Opinion and summarized below.

If this evaluation indicates that RPA implementation is neither timely nor sufficient, or is not adequate to address new information about species status, NOAA Fisheries must determine whether the deficiency can be remedied by actions within current authority (i.e., a "yellow zone" determination). If NOAA Fisheries determines that actions exist, within the full authority and capability of the Action Agencies, that can restore the timely and complete implementation of the RPA to the extent necessary to meet the expectations for the 2005 and 2008 check-in evaluations, then NOAA Fisheries will indicate how the Action Agencies can revise RPA implementation through new 1- and 5- year plans to meet the hydro and off-site performance standards. For example, the plans could call for further efforts to reduce hydro system mortality.

If this evaluation indicates that the insufficiency of the Action Agencies' RPA implementation cannot be remedied through changes to the 1- and 5-year plans (i.e., "red zone"), then NOAA Fisheries will issue a failure report. This could lead to a recommendation that the Action Agencies seek additional authority for further actions to avoid jeopardy.

In developing this implementation performance evaluation, NOAA Fisheries has relied largely on the detailed annual reviews of Action Agency implementation plans, as documented in our annual "Findings Reports," and these are incorporated by reference into this report. The most recent of these is the "Findings Regarding Adequacy of the FCRPS Action Agencies' 2003 Annual Implementation Plan" (<http://www.nwr.noaa.gov/1hydro/hydroweb/fedrec.htm>; hereinafter, 2003 Findings Report). The adequacy of implementing individual measures is reviewed in that report and is not repeated at the same level of detail in this determination.

NOAA Fisheries' 2002 and 2003 Findings Reports included our agreement to adjust the scope or schedule of some RPA Actions in response to proposals in the Action Agencies' implementation plans. NOAA Fisheries determined that these modifications were not a concern and were consistent with the conclusions of the Biological Opinion. These modifications were anticipated in Section 9.1.4 of the Biological Opinion, which states that, "An annual, multiyear planning process to refine, implement, evaluate, and adjust ongoing efforts is critical to achieving the FCRPS hydro and offsite performance standards within the time frame covered by this biological opinion. This will be accomplished through development and implementation of 1- and 5-year plans to achieve both hydro performance standards and offsite mitigation performance standards

...the RPA allows for revision of the specific measures throughout its term, as long as the Action Agencies make steady progress toward meeting performance standards and remain on track for full attainment of the hydro standards by 2010.”

We note that, while some of the RPA Actions have been updated through the Action Agencies’ 1- and 5-year implementation plans and the subsequent NOAA Fisheries Findings Letters, NOAA Fisheries identified several modifications as continuing concerns that required resolution. These modifications that required resolution are further discussed in this determination.

2. 2003 IMPLEMENTATION PROGRESS QUESTIONS

Question 1: Have Action Agencies obtained funding and authorizations necessary for timely implementation of key RPA Actions and have these RPA Actions been implemented as expected?

Question 1 Defined In Biological Opinion

“Whether the Action Agencies have obtained the funding and authorizations necessary for timely implementation of key RPA Actions identified in this RPA and the annual planning processes, and whether those actions are being implemented as expected or in a manner likely to be effective and timely as outlined in this biological opinion. Appendix F provides a summary of the actions, as of the date of this biological opinion, and the specific expectations for this progress check. Key actions are those that: 1) are expected to result in near-term survival benefits for the listed stocks; 2) are preparations for implementation of additional survival improvement measures; or 3) are planning, research, and monitoring actions that are important for implementation and evaluation of progress by 2005 and 2008. These expectations are the programmatic standards against which implementation success will, in part, be evaluated. Modification of the list of actions in Appendix F is expected through the 1- and 5- year planning consistent with these criteria above.”

Action Agencies’ Conclusion for Question 1

“The Action Agencies have obtained funding and authorizations necessary to implement most key actions under the BiOp. Collectively, we are annually spending about \$400 million per year for fish and wildlife mitigation. This represents an increase of approximately 28% since the 2000 BiOp was issued. Where they have occurred, neither funding nor authorization delays are expected to adversely affect near-term survival of listed fish. Prospective solutions developed during delays caused by regional coordination and environmental reviews should ultimately result in improved implementation” (Check-In Report, p. 17).

NOAA Fisheries’ Determination for Question 1

NOAA Fisheries agrees that most key actions have been implemented as expected, that the Action Agencies have sought funding and authority to implement key RPA Actions, and that they have obtained funding and authorizations for most key actions. Some important actions have not been implemented according to the schedule anticipated in the Biological Opinion; e.g., completing priority subbasin assessments, priority subbasin plans, Hatchery and Genetic Monitoring Plans (HGMPs; see Questions 3 and 5), and research and monitoring actions that are important for implementation and evaluation of progress by 2005 and 2008 (see Question 2). These delays represent a significant concern. Other delays that are of concern are described in

the 2003 Findings Report. We note that a new Libby Dam forecasting method, the delay of which was described as a concern in the 2003 Findings Report, is being implemented in fall/winter 2003. NOAA Fisheries anticipates it will have an opportunity to review the analysis and implementation effects of this information in the near future. Additionally, some activities that the 2003 Findings Report assumed would be completed by now have been delayed (e.g., HGMPs and some hatchery-related research activities).

In general, the lack of Congressional authorization has not contributed to significant delays, although it may affect two implementation measures that are identified as the responsibility of the USBR and the Corps.

The USBR continues to seek the construction authority necessary to directly address screen and passage issues in the priority subbasins. The USBR requested this authority, which has been proposed in S. 1307. The bill is currently under consideration by the Senate Energy and Natural Resources Committee and could receive further legislative action in 2004. Although USBR is currently providing technical and design assistance on proposed construction projects, without direct construction authority, there is no certainty that all proposed USBR-designed projects will be funded and implemented. Absence of these authorities may impede progress in priority subbasins where the Biological Opinion anticipated significant and immediate benefits to anadromous salmonids. However, NOAA Fisheries determined in the 2003 Findings Report that this is a relatively minor modification at this point in the implementation process, because work on tributary passage improvements is in the early stages, it is progressing at least to some extent in nine subbasins. Furthermore, BPA and others are funding and implementing projects that might otherwise have been funded by the USBR in these subbasins.

Although the Corps has capital programs to implement actions important to restore habitat, it does not currently have direct land acquisition authority. However, land acquisition activities necessary to build restoration projects are a requirement of the non-Federal sponsor under existing Corps authorities (a public or non-profit entity must own fee title or an easement on the project land). To overcome the absence of authority to acquire habitat, the Corps is pursuing actions on public land as well as in areas where existing landowners are willing to sell an interest in their property to a governmental agency or non-profit group. The Corps has proposed implementation of a land acquisition fund in the lower Columbia River. Pooled funding is to be used by a non-profit land trust to negotiate and purchase “willing seller” land meeting specific criteria as it becomes available. Corps restoration authorities, among other partners’ capabilities, would then be used to implement restoration actions once the land is acquired.

It is difficult to assess the degree that Congressional and other funding limitations may have affected the implementation of key actions. As the Action Agencies’ Check-In Report points out, lack of funding has not unduly delayed key actions. However, funding limitations have clearly affected the scope and rate of the Action Agencies’ implementation of the RPA. At least two of the major RPA funding mechanisms have faced limitations on programs, such as the

Corps' Columbia River Fish Mitigation Project and the Northwest Power and Conservation Council's Fish and Wildlife Program. In both cases, additional actions that could have furthered implementation of the RPA were not funded, or were funded after a delay of 1-2 years. This situation was particularly apparent in the delay of Corps' funding for flow deflectors to reduce dissolved gas levels at Chief Joseph Dam.

Question 2: Have adequate pilot studies and research and monitoring projects been implemented?

Question 2 Defined In Biological Opinion

“Whether the Action Agencies have initiated *adequate pilot studies, research, and monitoring* projects identified pursuant to Section 9.6.5.3 to confirm or rebut key assumptions. This documentation will include studies of the survival response to habitat actions identified pursuant to the RPA and the Basinwide Recovery Strategy as necessary to improve life-stage survivals of listed fish species.”

Action Agencies' Conclusions for Question 2

“The draft RM&E Plan represents a significant advance in monitoring and evaluation because it provides a vehicle for the federal agencies to synchronize their approaches to salmon study, especially for habitat-related actions, and to work jointly with the states and tribes to develop common monitoring protocols and study designs. The Action Agencies are annually implementing approximately \$70 million (the amount varies in any given year based on availability of funds and priority work) in research and monitoring projects. These studies include research and monitoring of juvenile and adult hydro survival, hatchery management changes, habitat status, effectiveness of off-site mitigation actions and critical uncertainties identified in the BiOp. Many of these studies are on the cutting-edge of scientific inquiry and will require multiple years of investigation to provide definitive results. The Action Agencies acknowledge, however, that the pilot studies, research and monitoring have not been implemented in accordance with schedules anticipated in the BiOp, because of regional coordination needs” (Check-In Report, p. 17).

NOAA Fisheries' Determination for Question 2

NOAA Fisheries agrees that important progress has been made in some areas of RM&E implementation. As described in the Action Agencies' 2003 Check-In Report, a draft RM&E Plan is currently undergoing review, pilot monitoring programs are being planned and will be underway in three subbasins in 2004, and a promising inter-governmental forum for coordinating and implementing monitoring activities is developing in a manner that is likely to facilitate RM&E implementation.

However, pilot studies, research, and monitoring have not been implemented in accordance with the specific schedules required by the Biological Opinion. In particular, action effectiveness research is proceeding at a slower pace and at a significantly reduced level of intensity than was anticipated by the RPA. The RPA specified that there would be at least three studies per evolutionarily significant unit (ESU), and at least two studies focusing on each major type of management action. Currently, one retrospective study is underway and three, more general, pilot studies to infer action effectiveness are scheduled to begin in 2004. None are designed to address the effectiveness of specific types of management actions. The reasons for the delay and reduced scope of action effectiveness monitoring are both technical and procedural. The technical issues are currently being addressed through the Independent Scientific Advisory Board's (ISAB) review of the draft Federal RM&E Plan.

As a result of delayed action effectiveness monitoring, the ability to quantitatively assess the potential effects of RPA offsite mitigation actions on the third population performance standard (p. 9-10) at the 2005, and possibly 2008, check-in is reduced. Additionally, for those RM&E activities currently underway, access to the resulting data and application of those results to the 2005 check-in will be limited because development of the regional data management system envisioned by the RPA has been delayed, since the Biological Opinion does not provide sufficient flexibility for the check-in time frames to be adjusted to meet these delays. We anticipate that more qualitative information will still support the 2005 evaluation, but there will be greater uncertainty associated with that determination than was originally anticipated in the Biological Opinion. Somewhat higher uncertainty than that anticipated in the Biological Opinion can be allowed because of the improvement in adult salmon and steelhead returns since issuance of the Biological Opinion in 2000. However, we suggest that the Action Agencies, along with NOAA Fisheries, plan for, and prepare to, implement additional action effectiveness monitoring, supporting data management activities, and other key RM&E actions immediately following receipt of ISAB recommendations.

Question 3: Have subbasin assessments, hatchery genetic management plans, and safety net plans been completed and results incorporated into site-specific off-site mitigation plans?

Question 3 Defined In Biological Opinion

“Whether *subbasin assessments* have been developed in accordance with Section 9.6.2.1 and *hatchery genetic management plans (HGMP)* and *safety net planning* have been completed pursuant to Section 9.6.4.2, as well as whether the results of these planning actions have been incorporated into site-specific plans for offsite mitigation.”

Action Agencies' Conclusions for Question 3

“Development of subbasin plans and hatchery genetic management plans have taken longer than originally anticipated in the BiOp. Delays have been encountered due to the need to ensure appropriate regional coordination. This requires collaboration with numerous interests, including states and tribes. All planning actions are underway according to revised schedules described in our implementation plans. In the meantime, the Action Agencies have funded hundreds of improvement actions targeted at high priority habitats and projects, and to fund ongoing hatchery programs, so that biological benefits are not lost while planning is underway.

The hatchery-based Safety Net Program, for fish populations facing a severe risk of extinction, has been successful. A number of safety net programs are being implemented, and others are being investigated. Given the improved condition of many ESUs, the numbers of additional safety net efforts may be lower than anticipated when the BiOp was written” (Check-In Report, p. 17-18).

NOAA Fisheries' Determination for Question 3

NOAA Fisheries agrees that subbasin assessments have not been completed for priority subbasins, as envisioned in the RPA. NOAA Fisheries believes that the absence of subbasin assessments may have reduced the effectiveness of offsite mitigation in these subbasins. However, we are well aware of the intensive and widespread effort underway to complete draft subbasin assessments and plans for the entire Columbia Basin under the auspices of the Northwest Power and Conservation Council by May 28, 2004. We encourage the Action Agencies to work with the Northwest Power and Conservation Council to complete draft subbasin assessments as soon as possible and we recommend that opportunities be provided for their early technical review in the winter of 2003-04, even before management plans are complete. We will also discuss this recommendation with the Northwest Power and Conservation Council's Regional Coordination Group. Additional comments and recommendations are included under Question 5.

NOAA Fisheries agrees that HGMPs have not been completed according to the schedule anticipated in the Biological Opinion. The 2003 Findings Report concluded, based on the Action Agencies' 2003 Implementation Plan, that development of HGMPs was on track for completion of all three phases in 2003, as anticipated in the Biological Opinion. The target completion date has been extended to the end of March 2004. The expected products at that time are Phase III HGMPs; i.e., HGMPs ready to begin the ESA review and approval process. NOAA Fisheries-approved HGMPs will be available at some later date. The Biological Opinion contemplated completion of HGMPs to allow reforms to be identified and promptly implemented by the responsible Action Agencies. Because of the delay in producing HGMPs, reforms have not yet been identified or implemented. However, certain reforms have been implemented on an ad-hoc basis or as necessary to meet hatchery Biological Opinion-mandated ESA responsibilities.

Although this delay is a concern, NOAA Fisheries supports and is participating in the Action Agencies' current process to develop Phase III HGMPs as soon as possible. We also support development of a multi-agency plan to implement ESA-related reforms identified in approved HGMPs as soon as possible after completion. NOAA Fisheries recommends that the Action Agencies plan to implement an appropriate portion of the identified reforms.

NOAA Fisheries does not believe that safety-net planning has been completed as anticipated in the Biological Opinion. The Action Agencies' conclusion that the safety net program "has been successful" is based on implementation of pre-existing projects that can be considered "safety nets," rather than on completion of planning for new projects. Planning and development of criteria for future safety net artificial propagation projects (SNAPP) through the SNAPP program has progressed, but has not yet been completed, as anticipated in the Biological Opinion. However, NOAA Fisheries does not consider this delay to be a significant problem because strong adult returns over the last few years have reduced the immediate need for additional safety-net artificial propagation programs. The 2002 and 2003 Findings Reports acknowledged the new schedule and concluded that the modification was not a concern.

Question 4: Have biological performance standards to evaluate population status and action effectiveness been developed?

Question 4 Defined In Biological Opinion

"Whether the Action Agencies, in coordination with other Federal agencies, have adopted biological performance standards determined by NOAA Fisheries, based on the best science available, as sufficient: 1) to *evaluate the status of each ESU relative to survival and recovery indicator criteria*, using, in particular, ESU-specific recovery standards that incorporate measures of abundance, productivity trends, species diversity, and population distribution; and 2) to *evaluate how effectively the actions produce survival improvements* to meet the offsite mitigation performance standard described in Table 9.2-4."

Action Agencies' Conclusions for Question 4

"The Action Agencies are using adult abundance and trends in adult abundance as primary measures of population performance. The population growth rate (λ) is also used as a longer-term performance metric. Further development of ESU specific recovery targets that incorporate measures of abundance, productivity trends, species diversity, and population distribution are expected from ongoing work of NOAA's Technical Recovery Teams that is being funded by the Action Agencies. Hydro survival standards are being used for adult and juvenile passage through the system, based on the BiOp. However, the Action Agencies believe the primary performance standard should be juvenile total system survival, with in-river juvenile survival as a secondary standard. Further development of performance standards utilizing these metrics is still under development and coordination" (Check-In Report, p. 18)

NOAA Fisheries' Determination for Question 4

NOAA Fisheries agrees that neither the Action Agencies nor NOAA Fisheries have developed biological performance standards, in addition to, or in place of, the biological performance standards described in the Biological Opinion. The Action Agencies indicate that at some future date they may propose alternative performance standards to certain Biological Opinion performance standards, but at this point these alternatives are “still under development and coordination.”

NOAA Fisheries will work with the Action Agencies to develop specific proposals and rationale. In the meantime, we do not consider delay in developing new ESU-level biological performance standards or hydro biological performance standards a problem because the performance standards described in the Biological Opinion (Sections 9.2.2.1 and 9.2.2.2.1) can be applied at the 2005 and 2008 implementation evaluations for all but two species addressed by the RPA. Although final recovery goals have not yet been adopted, the current schedule for both Columbia Basin Technical Recovery Teams indicates that recovery goals will be available well before the 2005 implementation evaluation and in time to guide implementation and be integrated into subbasin plans. In the meantime, NOAA Fisheries has issued interim recovery goals for most affected species. We do note that the Biological Opinion did not specifically define biological performance standards for Columbia River chum salmon or Snake River sockeye salmon, so we urge the Action Agencies to work with us to develop performance standards for these species prior to the 2005 evaluation.

NOAA Fisheries does consider the delay in developing offsite mitigation performance standards at smaller scales than the population level to be a concern. We encourage continued investigations to develop these biological performance standards. We expect that development of these smaller-scale biological performance standards will be informed by watershed assessments and plans, which in turn will be informed by Technical Recovery Team work products and subbasin assessments and plans. The schedule for these products and implications of that schedule are discussed in Question 2.

Question 5: Have detailed site-specific offsite mitigation plans been adopted?

Question 5 Defined In Biological Opinion

“Whether the Action Agencies have adopted detailed *site-specific, offsite mitigation plans* to meet the offsite mitigation performance standard described in Table 9.2-4, based on completed subbasin assessments, finer scale analyses, and the best available science, are implementing such plans in accordance with their provisions, and have adequate monitoring in place to evaluate their effectiveness.”

Action Agencies' Conclusion for Question 5

“Even though detailed off-site plans developed through subbasin planning and the HGMPs are not yet complete, the Action Agencies are prioritizing and implementing habitat actions using an interim biologically based framework. The Action Agencies have used this framework to rank ESUs and priority subbasin as reflected in the annual and five-year implementation plans. These plans are formulated to improve habitat conditions in all anadromous subbasins, ensuring important biological priorities for listed fish are addressed. In 2004 these plans will be further informed by subbasin planning. Additional coordination with the Council’s review process will be needed to allocate funding in accordance with BiOp priorities and achieve maximum benefits for the ranked ESUs. In the longer term, the TRT “limiting factors” assessments, subbasin plans, the monitoring program for biological and physical performance relative to performance standards, and research results on the effectiveness of actions will help advance the Action Agencies’ development of habitat action plans” (Check-In Report, p. 18)

NOAA Fisheries' Determination for Question 5

We agree with the Action Agencies that detailed site-specific offsite mitigation plans, based on subbasin assessments and HGMPs (see Question 2), have not yet been developed for priority or other subbasins. However, NOAA Fisheries remains supportive of the subbasin planning process. Significant progress has been made to establish a collaborative planning infrastructure and in developing subbasin assessments and plans. Draft subbasin plans are expected in mid-2004 and final plans are expected by the end of 2004, in time for the next provincial review project selection cycle. NOAA Fisheries encourages the Action Agencies to work with the Northwest Power and Conservation Council to establish a credible “fix it” loop for the subbasin plans in response to technical review between May 2004 and December 2004. Subbasin planners must be afforded a realistic and credible opportunity to respond to technical comments and improve their plans between draft and final plans. This would also allow inclusion and integration of input from Technical Recovery Team products. NOAA Fisheries also recommends the support and development of a coherent implementation framework for subbasin plans. NOAA Fisheries intends to incorporate subbasin plans into ESU-wide recovery plans and into provincial strategies. This will allow project priorities for the Northwest Power and Conservation Council’s provincial review process to be coordinated and implemented in a unified manner. NOAA Fisheries, jointly with the Action Agencies, will discuss these recommendations with the Northwest Power and Conservation Council’s Regional Coordination Group.

In the absence of subbasin plans, the Action Agencies have been implementing a large number of site-specific offsite mitigation projects, with selection based on interim Action Agency criteria, regional coordination through the Northwest Power and Conservation Council’s Fish and Wildlife Program (including NOAA Fisheries’ participation), and independent scientific review.

General descriptions of the offsite mitigation program and goals have been included in the one- and five-year implementation plan narratives. It is important to bear in mind that many of the offsite mitigation actions were designed to be short-term initiatives while subbasin plans were in development. In addition to creating some immediate survival improvements, it was important to learn from these initiatives so that they could be applied as part of ESU-wide strategies. To provide greater learning opportunities, NOAA Fisheries recommends that the Action Agencies summarize the performance of their off-site initiatives, such as water transactions, conservation easements, and riparian protection, in the annual progress reports.

Question 6: Have physical performance standards to achieve habitat attributes and hatchery reforms been established?

Question 6 Defined In Biological Opinion

“Whether the Action Agencies have established *measurable, objective physical performance standards* approved by NMFS [NOAA Fisheries] based on the best available science to achieve habitat attributes and hatchery reforms through management actions that provide the life cycle survival improvements needed to achieve survival and recovery indicator criteria consistent with Sections 9.2.2.2.2 and 9.2.3.”

Action Agencies’ Conclusion for Question 6

“Interim performance measures have been developed for habitat actions, addressing items such as passage improvements, fish screening, water quality increases, and riparian and estuary improvements. More specific physical and biological measures for habitat and hatcheries have been identified and are being addressed through the NOAA and Action Agency RME Program. Further development of performance standards utilizing these metrics is still under development and coordination” (Check-In Report, p. 18).

NOAA Fisheries’ Determination for Question 6

NOAA Fisheries agrees that, while there has been progress in developing performance measures, neither the Action Agencies nor NOAA Fisheries have developed physical performance standards to “supplement and sometimes serve as surrogates for biological performance standards.” The Action Agencies indicate that at some future date they may propose physical performance standards, but at this point new physical performance standards that might be evaluated in 2005 and 2008 are “still under development and coordination.” NOAA Fisheries supports, and is participating in, discussion of relevant physical performance measures with the Action Agencies. We also support, and intend to participate in, future discussions of relevant performance standards.

Currently, relevant physical performance standards are those described in the Biological

Opinion. The Biological Opinion described hatchery-related physical performance standards in Section 9.2.3 and specific physical standards were associated with certain hydro and habitat RPA Actions. Because the physical performance standards are primarily supplemental in nature, and because certain physical performance standards are already defined in the Biological Opinion, the lack of additional physical performance standards at this point is not a significant concern. We do, however, recommend the following approach to ensure that physical performance standards are developed expeditiously and are informed by relevant analyses and planning products.

The first step in developing new performance standards is to define relevant performance measures. The Action Agencies and NOAA Fisheries have begun this process. For example, the September 2003 Draft RM&E Plan produced by the Action Agencies and NOAA Fisheries (http://www.salmonrecovery.gov/RME_Plan_09-2003.pdf) proposes physical performance measures for tributary habitat monitoring (e.g., temperature, channel width/depth ratio). The draft plan is currently under review by the Independent Scientific Advisory Board. In the short-term, NOAA Fisheries believes that appropriate performance measures should be linked to limiting factors that are expected to be identified through the Technical Recovery Team and subbasin planning work products. The development of appropriately scaled performance standards, which will be applied to the selected performance measures, should be derived from watershed and finer-scaled analyses. This is likely to occur over the longer term, since the number and distribution of those finer scaled assessments are identified as products of subbasin assessments and plans. See Question 2 for a discussion of the current schedule for completion of subbasin assessments and implications of that schedule.

Question 7: Have funding and authorizations been obtained by other Federal agencies for timely implementation of the Basinwide Recovery Strategy?

Question 7 Defined In Biological Opinion

“Whether the Federal agencies participating in the Federal Caucus (other than the hydro Action Agencies) have obtained the funding and authorizations necessary for the timely implementation of specific *action items identified in the Basinwide Recovery Strategy* and whether those action items are being implemented in a manner likely to be effective, timely, and consistent with the scientific basis for the Basinwide Recovery Strategy. Federal Caucus members will provide this information to NMFS [NOAA Fisheries] and the Action Agencies as part of the Basinwide Recovery Strategy implementation.”

Action Agencies’ Conclusion for Question 7

“The Federal Caucus agencies have made considerable progress implementing measures identified in the Basinwide Salmon Recovery Strategy. Funding has been timely overall, although some uncontrollable factors (e.g., fire suppression costs) have caused some funding

resources to be redirected or reduced. Although most agencies are budgeting a steady or increasing amount of funds for fish recovery efforts each year, some agency requests have not been fully funded. For example, NOAA's RM&E requests have not been funded and this has contributed to a slower pace of development of the RM&E Plan than anticipated in the BiOp" (Check-In Report, p. 18).

NOAA Fisheries' Determination for Question 7

While NOAA Fisheries agrees that considerable progress has been made by Federal Caucus agencies in implementing the Basinwide Salmon Recovery Strategy, not all actions are being implemented in a timely manner. Also, because action effectiveness monitoring is just getting underway (see Question 2), NOAA Fisheries is unable to determine with certainty whether those actions that are being implemented are "likely to be effective." The main areas of concern with respect to Federal agencies other than the FCRPS Action Agencies regard expectations from the U.S. Bureau of Land Management (BLM), the U.S. Forest Service (USFS), and NOAA Fisheries.

The commitments of the Federal land managers in the Basinwide Salmon Recovery Strategy consisted of elements of both habitat protection and habitat restoration. The Basinwide Salmon Recovery Strategy proposed that habitat protection would be accomplished in the long term through implementation of the Aquatic Conservation Strategies of the Northwest Forest Plan and PACFISH. Various annual reporting processes, such as that of the Interagency Implementation Team, have determined that the BLM and USFS are doing a better job of protection than they are of restoration. With respect to habitat restoration in the short term, Federal land managers in the Basinwide Salmon Recovery Strategy expected to implement an accelerated restoration program in seven watersheds with large Federal ownerships.

After three years of implementation, restoration is proceeding, but not at the pace contemplated in the Basinwide Salmon Recovery Strategy. Current funding to support accelerated restoration from agency appropriations has declined since the Basinwide Salmon Recovery Strategy Memorandum of Understanding (MOU) was signed in December 2000. This decline is primarily due to generally flat budgets, increasing fixed costs, large increases in wildfire suppression costs, and other higher priority and/or competing work activities. Nevertheless, the land management agencies have actively worked to prioritize existing funding and leverage outside funding to provide aquatic habitat restoration in priority watersheds on Federal lands. The USFS continues to actively engage with states in development of Total Maximum Daily Limits for water quality factors and in development of restoration partnerships with watershed councils, states, tribes, and local communities through agency programs.

For the interior portion of the Columbia River Basin, the Basinwide Salmon Recovery Strategy anticipated that long-term management direction to replace the interim aquatic strategy (PACFISH) would occur through an Interior Columbia Basin Ecosystem Management Plan

(ICBEMP) Record of Decision (ROD). Although the ICBEMP ROD was not signed, an interagency strategy and associated MOU was signed. The MOU will guide future Land and

Resource Management Plan (LRMP) revisions in the development of aquatic habitat protection and restoration objectives, using the best available science.

NOAA Fisheries has improved non-Federal hydro survival through its ESA and Federal Power Act regulatory authorities, constrained harvest impacts to recent levels through similar regulatory authority, and distributed some Pacific Coast Salmon Recovery Funds to states and tribes for recovery activities in the Columbia River Basin. However, NOAA Fisheries has not been able to implement a significant portion of the RM&E program, as anticipated in both the Biological Opinion and the Basinwide Salmon Recovery Strategy. Under the RPA, NOAA Fisheries and the Action Agencies are jointly responsible for developing the comprehensive RM&E plan, satellite and aerial monitoring, determining reproductive success of naturally-spawning hatchery-produced fish, hatchery research, conducting juvenile studies (including delayed mortality), developing a physical model of the Columbia River plume, investigating juvenile and adult use of estuary and plume, and developing a regional data management system. If the monitoring program is less extensive than expected, it will be difficult to evaluate performance standards at either the 2005 or 2008 evaluation. This will result in less certainty about success of the RPA at those junctures.

3. CONCLUSION

NOAA Fisheries concludes that, on balance, the Action Agencies' implementation of the RPA is not meeting expectations, but is capable of timely resolution within current authority ("yellow zone").

Implementation is not in the "green zone" because, although good progress is being made on many of the activities referenced in the seven questions, there is still room for improvement. The primary reason for our determination that expectations are not being met is the delay of: 1) key actions that represent preparations for implementation of additional survival improvement measures; and 2) key planning, research, and monitoring actions that are important for implementation and evaluation of progress by 2005 and 2008 (i.e., primarily Questions 2, 3, and 5). We note that the delays cannot be remedied, but that current deadlines and milestones, as noted in the Action Agencies' Implementation Plans, represent a more realistic schedule and should be adhered to.

Implementation is not in the "red zone" because, while there has been a slower start than anticipated in several areas, NOAA Fisheries recognizes that there are processes currently underway to develop the delayed products and we expect their completion within 1-2 years. While not consistent with the initial schedules developed in the Biological Opinion, it is our current opinion that, on balance, this programmatic effort, in concert with the additional recommended actions listed below, is adequate for the FCRPS Action Agencies to continue to avoid jeopardizing the listed stocks or adversely modifying designated critical habitat. In spite of the delays in developing planning products and initiating some monitoring programs, implementation of offsite mitigation actions has been proceeding. The main impact of the delayed planning products is reduced certainty that the implemented actions are of the appropriate type and magnitude to meet performance standards for each ESU. However, the offsite mitigation actions implemented to date have been regionally reviewed and coordinated to take advantage of the best available information and expertise of regional managers regarding needs of listed fish within each province. The delay in implementing an action effectiveness monitoring program means that the 2005 and 2008 evaluations will be based on less quantitative information than originally expected. We expect more qualitative information to support the 2005 evaluation. These delays are generally not a result of lack of legislative authority or funding limitations. We conclude that, at this point, new authorities or a change in the fundamental direction of Biological Opinion implementation are not warranted.

We note that, because recent runs have been higher than expected in the Biological Opinion, there is a reduced short-term risk associated with the delayed schedule for some RPA Actions. While this situation allows some flexibility in short-term schedules, it is still important to implement actions as soon as possible in order to meet the long-term goals.

According to the requirements of the Biological Opinion, in response to a “yellow zone” conclusion, NOAA Fisheries must recommend modifications to the one- and five-year plans that would bring implementation sufficiently into conformance with the RPA. In general, the problems with implementation have been delays in producing planning products and implementing monitoring activities. As stated above, NOAA Fisheries generally supports the current activities to complete the planning products and to implement appropriate monitoring according to the Action Agencies’ revised schedules. However, success in meeting performance standards is dependent upon completing the planning products and, upon completion, to immediately implement their key recommendations. Therefore, some specific recommendations follow. These recommendations are critical to our determination that the Action Agencies’ implementation of the Biological Opinion is capable of timely resolution within current authority.

1. BPA should continue to work with the Northwest Power and Conservation Council to assure completion and updating of subbasin assessments and plans. As stated in Question 5, NOAA Fisheries encourages the establishment of a credible “fix it” loop for the subbasin plans in response to technical review between May 2004 and December 2004. This would also allow inclusion and integration of input from Technical Recovery Team products. NOAA Fisheries also recommends the support and development of a coherent implementation framework for subbasin plans. NOAA Fisheries intends to incorporate subbasin plans into ESU-wide recovery plans and into provincial strategies. This will allow project priorities for the Northwest Power and Conservation Council’s provincial review process to be coordinated and implemented in a unified manner.
2. Similarly, a multi-agency implementation plan should be developed for ESA-related reforms identified in approved HGMPs. NOAA Fisheries recommends that the Action Agencies plan to implement an appropriate portion of the identified reforms.
3. NOAA Fisheries recommends that the Action Agencies summarize the performance of their off-site initiatives, such as water transactions, conservation easements, and riparian protection, in the annual progress reports.
4. In the area of RM&E, NOAA Fisheries is aware that three pilot projects to develop a coordinated status and effectiveness monitoring program will begin in 2004. The draft Federal RM&E Plan anticipates that the information from these pilot studies and from the ISAB review will be used to inform and expand a coordinated monitoring program to additional subbasins. NOAA Fisheries recommends that the Action Agencies plan to implement an appropriate portion of the coordinated program (including data management needs).
5. As stated above and in Question 2, access to data generated by regional monitoring activities is important for evaluating Biological Opinion implementation relative to

performance standards. A joint NOAA Fisheries and Northwest Power and Conservation Council project made general recommendations for developing a regional data management system. Subsequently, the Columbia Basin Cooperative Information System team developed a more detailed work plan, which will require multi-agency funding and effort to implement. NOAA Fisheries recommends that the Action Agencies plan to implement an appropriate portion of the coordinated program to ensure availability and accessibility of data for evaluating performance standards for ESA-listed fish.