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UNITED STATES DISTRICT COURT

DISTRICT OF OREGON

NATIONAL WILDLIFE FEDERATION, *et al.* Plaintiffs, v. NATIONAL MARINE FISHERIES SERVICE, *et al.,* Defendants.	Civil No. 01-640-RE **MEMORANDUM IN SUPPORT OF FEDERAL DEFENDANTS' CROSS-MOTION FOR SUMMARY JUDGMENT AND OPPOSITION TO PLAINTIFFS' AND INTERVENOR-PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT**

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ABBREVIATIONS

APA = Administrative Procedure Act

BA = Biological Assessment

BiOp = Biological Opinion

BMP = Best Management Practice

BOR = Bureau of Reclamation

BPA = Bonneville Power Administration

BRT = Biological Review Team

CA = Comprehensive Analysis

COMPASS = Comprehensive Fish Passage

COP = Configuration and Operation Plan

CRITFC = Columbia River Inter-Tribal Fish Commission

CWA = Clean Water Act

DPS = Distinct Population Segment

ESA = Endangered Species Act

ESU = Evolutionarily Significant Unit

FCRPS = Federal Columbia River Power System

FWS = U.S. Fish & Wildlife Service

HGMP = Hatchery and Genetic Management Plans

HSRG = Hatchery Scientific Review Group

ICTRT = Interior Columbia River Basin Technical Recovery Team

ISAB = Independent Scientific Advisory Board

ISRP = Independent Science Review Panel

IT = Implementation Team

ITS = Incidental Take Statement

LCREP = Lower Columbia River Estuary Partnership

MOA = Memorandum of Agreement

MPG = Major Population Group

NOAA = National Oceanic and Atmospheric Administration

PIT = Passive Integrator Transponder

PCE = Primary Constituent Elements

PWG = Policy Work Group

QET = Quasi-Extinction Risk

RIOG = Regional Implementation Oversight Group

RME = Research, Monitoring and Evaluation

ROD = Record of Decision

RPA = Reasonable and Prudent Alternative

R/S = Recruit-per-Spawner

RSW = Removable Spillway Weir

SCA = Supplemental Comprehensive Analysis

SR = Snake River

SRKW = Southern Resident killer whale

SRWG = Studies Review Work Group

TRT = Technical Recovery Team

TSW = Prototype Temporary or Top Spill Weir

UCR = Upper Columbia River

CITATION FORMAT

References to "Doc. ___" refer to docket entries in the above-captioned case. References to "NWF Br." and "NWF Stat. Facts" refer to NWF's memorandum in support of motion for summary judgment (Doc. 1499) and NWF's concise statement of facts (Doc. 1504), respectively. References to "OR Br." and "OR Stat. Facts" refer to Oregon's memorandum in support of motion for summary judgment (Doc. 1508) and Oregon's concise statement of facts (Doc. 1509), respectively. References to "NPT Br." refer to the Nez Perce Tribe's memorandum in support of Plaintiffs' motion for summary judgment (Doc. 1505). References to "NOAA ___" and "Corps __" and "BOR __" refer to NOAA's Administrative Record (Doc. 1480) and the Action Agencies' Administrative Records (Doc. 1512), respectively. For NOAA's administrative record, the citation format "NOAA xxxx at yyyyy" indicates that "xxxx" is the document within the administrative record, whereas "yyyy" is the page number within that particular document. For the Corps and BOR's administrative records, the citation format "Corps xxxx at yyyy" indicates that "xxxx" is the document within the administrative record, whereas "yyyy" is the Bates stamped number in the lower right hand corner. Commonly referred to documents, such as the 2008 FCRPS BiOp, provide the administrative record citation only once and then revert to the document's name ("BiOp at xxxx"), where "xxxx" is the page number within the biological opinion.

COMMON ADMINISTRATIVE RECORD CITATIONS

2008 FCRPS Biological Opinion: NOAA A1

Supplemental Comprehensive Analysis: NOAA A2

Comprehensive Analysis: NOAA B92

FCRPS Biological Assessment: NOAA B89

Response to Comments: NOAA C1155

Issue Summaries: NOAA S77

Columbia Basin Fish Accords: Corps 00372, 00380, 00404, 00397

Corps Record of Decision: Corps 0026

BOR Record of Decision: BOR 00005

BPA Record of Decision: Corps 00013

INTRODUCTION

When Judge Marsh first looked at the status of Snake River ("SR") fall Chinook, he saw a dire situation. The number of wild SR fall Chinook had fallen dramatically to roughly 240 returning adults with a juvenile hydropower system mortality rate of approximately 81-93%.[1/] Without question, this was an Evolutionarily Significant Unit ("ESU") that was in trouble and needed help. This led Judge Marsh to urge the Federal agencies to make difficult decisions and do more than maintain the *status quo.* In 2001, this Court took control and following on the heels of Judge Marsh's admonitions urged, sometimes strongly, that the Federal agencies commit themselves to a legally sound process and do what must be done under the Endangered Species Act ("ESA"). During these last eight years, this Court has expressed its desire, at times with frustration, that the Federal agencies must make difficult decisions and listen to the other sovereigns if they are to write a valid Federal Columbia River Power System Biological Opinion ("BiOp"). And as this Court has recently emphasized, because the public deserves no less, the Federal agencies must get the BiOp right this time.

Federal Defendants have heeded this Court's admonitions and submit that the FCRPS BiOp does just what this Court directed: After an extensive and fully transparent collaboration with the regional State and Tribal sovereigns, Federal Defendants have produced a comprehensive BiOp that is grounded firmly in sound science, that significantly improves the *status quo*, and that fully complies with the ESA and this Court's and the Ninth Circuit's orders. As this Court is aware, this BiOp is the culmination of an unprecedented two-plus year collaboration among all relevant sovereigns that had at its foundation extraordinary work by Federal, State, and Tribal biologists, scientists, and engineers. These technical professionals invested their expertise and literally

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[1/] *See Idaho Dep't of Fish and Game v. NMFS,* 850 F. Supp. 886, 897, 899 (D. Or. 1994).

thousands of hours into this process to assure that Federal Defendants produced a biologically sound BiOp. But in addition to this hard work, difficult decisions indeed were made. Federal Defendants fully committed themselves to this process and in doing so created a BiOp and package of mitigation that is not only sufficient under the ESA, but fundamentally supports Federal Defendants' treaty and other responsibilities to the Tribes.

Federal Defendants acknowledge that not every party is satisfied with the remand process. Some believe that if they do not attain their desired modifications, the system has not experienced the "major overhaul" called for by Judge Marsh. But that narrow view ignores the significant changes that have been made since the first ESUs were listed and the new level of commitment this remand has brought to salmon mitigation in the Columbia basin. Over the last three years, the Federal agencies, with the help of the States and Tribes, have compiled the most comprehensive analysis of the three major Federal actions on the Columbia and Snake rivers. They reached a ten-year harvest management agreement in *United States v. Oregon* supported by the overall mitigation package that allows for more Tribal and non-Tribal harvest in years of high abundance. Previous efforts with the Nez Perce Tribe resulted in the passage of Snake River Water Rights Act of 2004, Pub. L. No. 108-447 118 Stat. 2809 (Dec. 8, 2004), providing over $60 million to the Nez Perce Tribe and greater assurances of flow augmentation from the Upper Snake. And perhaps most importantly, the Bonneville Power Administration ("BPA"), the U.S. Army Corps of Engineers ("Corps"), and Bureau of Reclamation ("BOR") (collectively "Action Agencies") executed the Columbia Basin Fish Accords ("Fish Accords") with the States of Idaho and Montana, as well as the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Colville Reservation, as well as the Columbia River Inter-Tribal Fish Commission ("CRITFC"), that provides, among other things, a commitment to spend up to $933

million over the next ten years, primarily on salmon mitigation and recovery, and an additional $50 million on lamprey. While these actions are grounded in science, they are backed by firm financial commitments. In 2009 alone, BPA committed to an incremental increase in rates for the BiOp and Fish Accords by $70 million, and has proposed increases of roughly $120 million per year in preparation for rate proceedings for 2010 and 2011. The money for the BiOp and Fish Accords is reasonably certain to occur.

The parties that did not get their way in the remand now seek to achieve their goals through litigation. In large part, they question the analytical approach. These dissenting voices are not new. They were heard throughout the remand process and their points were fully vetted and considered. However, the regional sovereigns, not just Federal Defendants, often found these various positions biologically unsupportable. The fact is that while these dissenting parties dress up their complaints as claims about analytical methods and scientific judgments, at bottom their challenges are really driven by philosophical views about how the FCRPS should be run and, certainly for NWF and the Nez Perce Tribe, about whether the Snake River dams should even exist.

These philosophical disagreements and resultant litigation positions fail to even acknowledge the gains that have been made in the past decade. Since Judge Marsh's review in 1993, juvenile in-river survival has increased dramatically as a result of operational and structural changes. Thousands of habitat actions have been funded and completed. The region has taken a hard look at hatcheries resulting in modified operations. And, harvest (both Tribal and non-Tribal) has been reduced from historical levels. As a result, since those 240 SR fall Chinook returned in 1993, the numbers within that ESU have grown measurably. In the last five years, this ESU consistently has averaged thousands of wild fish exceeding the recovery criteria. Indeed, limited sport fishing for SR fall Chinook resumed this fall for the first time in 30 years. Similarly, the other ESUs all appear to have benefitted from past actions and numbers generally have increased. Certainly, more needs

to be done if we are to achieve recovery, but suggesting that nothing has changed reflects a stubborn and dogmatic refusal to look honestly at the effect of past mitigation, current data, and recent fish counts.

At bottom, it is clear that anything short of adopting the specific operations preferred by the dissenting voices will, in their view, always be insufficient regardless of the soundness of the science supporting the BiOp. Federal Defendants respect that NWF, Oregon, and the Nez Perce Tribe have different views as to how the FCRPS system should be run. However, simply because the BiOp does not adopt wholesale all of the operations sought by these dissenting voices does not render the BiOp invalid. Indeed, this BiOp enjoys more regional consensus than any previous salmon plan, at any other time. That is because no one sovereign – including Federal Defendants – dictated the outcome to coincide with their own philosophical views. This BiOp is based on sound science, is supported by the record, and fully complies with the law. Accordingly, the Court should grant Federal Defendants' cross-motion for summary judgment so that the biologists and hydrologists can focus their efforts on salmon mitigation and recovery rather than litigation.

BACKGROUND

I. LEGAL BACKGROUND

The Court is familiar with the statutory background for ESA § 7(a)(2) consultations. 16 U.S.C. § 1536(a)(2). Therefore, Federal Defendants do not repeat that background here but instead incorporate by reference the statutory background section filed in previous pleadings in this case. *See* Memorandum in Support of Federal Defendants' Motion for Summary Judgment and Opposition to Cross-Motions of NWF and Oregon at 12-17 (Doc. 825).

II. FACTUAL BACKGROUND

A. The 2005 Remand Order and Collaboration Process

On October 7, 2005, the Court issued an Opinion and Order of Remand for the 2004 FCRPS

BiOp ("2005 Remand Order") (Doc. 1087). The Court instructed Federal Defendants to remedy the deficiencies identified in the May 7, 2003 and May 26, 2005 Opinions and Orders. *Id.* at 11. To ensure that these instructions were followed and the deficiencies addressed, the Court directed Federal Defendants to "collaborate with the sovereign entities...to achieve the goals of: (a) Developing items to be included in the proposed action; and (b) Clarifying policy issues and reaching agreement or narrowing the areas of disagreement on scientific and technical information." *Id.* at 11-12. This instruction required Federal Defendants to listen to the other sovereigns's insight and rely upon their technical assistance, which in turn, aided in the development of a legally sound BiOp.

To facilitate the collaboration, Federal Defendants, along with their sovereign counterparts, established technical workgroups comprised of scientific and technical representatives from the participating sovereigns. NOAA C42 at 13. These technical workgroups, each chaired by career scientific professionals, were comprised of the regional experts on a given scientific or technical subject matter. *Id.* at 48. The collaborating parties also established an umbrella Policy Working Group ("PWG") comprised of representatives from each sovereign. *Id.* at 13. In addition, although not required by this Court's remand order or the ESA, the collaborating sovereigns made extensive efforts to inform non-sovereign entities such as NWF of the work of the collaboration and solicited comment and input from these parties as well. NOAA C30, C39, C51, C66, C120, C223. These outreach efforts included in-person briefings, attendance by non-sovereign representatives at all technical meetings, web-based access to documents, and the opportunity to comment on the proposed action and draft BiOp.

The collaboration provided a forum in which scientific ideas could be vetted thoroughly by technical experts in their respective fields and then subjected to outside scrutiny by non-sovereign entities. NOAA S77 (Issue Summaries). Each scientific aspect of this BiOp was discussed first at

a technical level and then, if there was disagreement, at the PWG. Examples include: (1) the biological modeling that provides insight as to the biological effects of different hydro operations (both spill and flow); (2) the tributary habitat methodology that is used to calculate benefits associated with the various tributary habitat restoration actions; and (3) new harvest and hatchery regimes and the attendant impact on adults. Where particularly controversial or difficult scientific issues were presented, the collaboration went even a step further and sought the review and input of the Independent Scientific Advisory Board ("ISAB") on specific issues. *Id.*

As is often the case with any complex subject matter involving the need to make scientific judgments in the face of uncertainty, the experts often disagreed on particular issues. Nonetheless, through perseverance and professionalism, consensus positions were established over time on most of the key scientific and technical issues. Just as importantly, the collegial, collaborative atmosphere allowed individual parties to pursue additional negotiations with the Action Agencies ultimately leading to the Fish Accords.

1. The Conceptual Framework

The collaboration began with the development of the Conceptual Framework. *See* Federal Defendants' First Remand Report, Attachments (Doc. 1222); NOAA C42. The Conceptual Framework structured the initial stages of the remand and was a process by which the sovereigns could move forward and discuss all of the issues, including, but not limited to, a candid assessment of Hydro Operations, Habitat, Harvest, and Hatcheries (the "four Hs"). *Id.* In the first status report, Federal Defendants clearly stated that the Conceptual Framework represented preliminary ideas as to how the *collaborative process* should be structured, but that ultimately NOAA would decide whether the operation of FCRPS complied with the ESA. *See* Federal Defendants' First Remand Report at 2. The framework utilized a ten-step process, but importantly, the tenth step explicitly recognized that NOAA would analyze the collective actions developed in collaboration and

determine if these were sufficient for ESA § 7(a)(2) purposes:

> With Steps 5 and 6 completed and Steps 7-9 included in the Proposed Action, NOAA Fisheries can perform the Section 7(a)(2) jeopardy analysis of the Action Agencies' new proposed FCRPS action (resulting from the Sub-Step5A) and render a new Biological Opinion with the required incidental take statement.

Id. at 6, Ex. 3. The Conceptual Framework also explicitly recognized that even though recovery in the broad sense (i.e., delisting an ESU) was the point of reference for many of these actions, it was not the jeopardy threshold. *Id.* at 2 ("For the 200[8] FCRPS BiOp, biological viability will serve as the reference point for desired status."); *see also id.* Figure 1: Conceptual Framework Diagram. With this framework in place, the sovereigns began the process of evaluating technical issues and proposed actions to improve fish survival, which was the primary currency of this process.

a. Tributary Habitat Methodology

The Collaboration Habitat Workgroup developed a tributary habitat methodology that would be used to evaluate the benefits of certain tributary habitat actions linked to key limiting factors within each ESU. NOAA B92 at C-1-12-13 (hereafter "CA") (discussing the PWG meetings on this issue). This methodology, consisting of six steps, relied upon local biologists to help make these determinations, which the sovereigns agreed would aid in the accuracy of the projections. NOAA A2 at 7-44 (hereafter "SCA") ("This approach is thus based on best available information from local field biologists and recovery planners and general empirical relationships between habitat quality and salmonid survival."). This was the methodology that was employed in the subsequent consultation processes and BiOp. CA at C-1-2 (explaining logic path). Indeed, this is the same methodology that the Nez Perce Tribe used to assign benefits to their various habitat projects submitted to this Court in the Declaration of Emmit E. Taylor. *See* NPT Br. at 28-34.

b. Spill and Transport

The collaboration spent a considerable amount of time discussing and evaluating the

effectiveness of various spring and summer spill and transport operations. *See e.g.*, NOAA C275. From these discussions, the sovereigns agreed that spill was an effective passage route, but that transportation was an equally useful tool for managing the juvenile migration. *Id.* Regardless of differences, all involved recognized that each year's operations must adjust to new information and data because each year new data reveal more advantageous operational configurations. The task then became to formulate a framework in which the sovereigns could adjust for yearly change, but at the same time provide parameters ensuring that the fundamental operation was not likely to jeopardize the respective migrating ESU. These are commonly referred to as "performance standards."

Consideration was given also to specific operational plans, like spill percentages and transportation dates. *See e.g.*, NOAA B89 (Appendix A) at A-17 – A 20 (hereafter "BA") (documenting the significant changes in spill operations over the last 20 years). Because it is not possible to test every operational configuration, NOAA developed a model for Comprehensive Fish Passage ("COMPASS") allowing computerized simulation of a broad array of configurations and operations. *See* NOAA S77 at 19. These collaborative modeling discussions informed the assumptions and, in part, the formulation of COMPASS. *Id.* In its most basic form, COMPASS predicts how salmon will fare through the hydro system and how many adults are likely to return. *Id.* at 20 ("The COMPASS model employs a series of mathematical equations that estimate survival through the successive reservoirs and dams of the FCRPS."); *see also id.* ("Estimates of the effects of FCRPS passage on smolt survival after leaving the FCRPS and adult returns are estimated by an equation that describes the relationship between day of Bonneville tailrace arrival and adult return rate (derived from multi-year PIT tag studies."). COMPASS has been published in a peer-reviewed journal, and the ISAB has reviewed this model no less than four times, consistently finding that COMPASS was "a welcome addition to the analytical tools available to both scientists and

managers."[2/] *See* Federal Defendants' Response to NWF's Request for Status Conference, Exhibits 1 and 2 (Doc. 1458).

B. The Action Agencies' Comprehensive Analysis and Biological Assessments

On September 26, 2006, this Court recognized that although Congress required BOR and NOAA to produce a separate BiOp for the Upper Snake, it should analyze nevertheless both FCRPS and the Upper Snake projects at the same time to ensure that there was a comprehensive analysis in both basins. *American Rivers v. NOAA Fisheries*, 04-CV-61-RE (D. Or.), Opinion and Order of Remand, September 26, 2006 (Doc. 28) at 8; *see also* CA at 1-2. In addition, during the remand period, the Court issued its summary judgment opinion in *American Rivers*. In that opinion, the Court expressed concern that if the action was characterized as a proposed action rather than a Reasonable and Prudent Alternative ("RPA"), the agencies were "relieved of the burden of ensuring that it is reasonably certain to occur." Opinion and Order, May 23, 2006 (Doc. 263) at 20 n.7. As a result of the Court's concern and to further the work performed in the collaboration, the Action Agencies themselves (rather than NOAA) concluded that the operation of FCRPS was likely to jeopardize these ESUs and accordingly developed their own Proposed RPA. *See* BA at 1-7 ("proceeding in this manner facilitates the development of a new BiOp for a RPA designed through such collaboration within the limited time [and] addresses Judge Redden's concern in *American Rivers v. NOAA Fisheries* regarding possible differences between 'certainty' requirements for a RPA versus [sic] proposed action.").

The Action Agencies' Proposed RPA is contained within their FCRPS Biological

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[2/] Despite this extensive independent scientific review, Plaintiffs appear to take issue with COMPASS. *See e.g.,* NWF Br. at 36 n.29. They note that the U.S. Fish and Wildlife Service sent the ISAB concerns about COMPASS while it was being reviewed. *Id.* Plaintiffs, however, neglect to inform the Court that even though these critiques were brought to the attention of the ISAB, the ISAB found COMPASS to be sound and a useful tool.

Assessment. BA at 2-71 through 2-147. Although this Proposed RPA is massive and was modified later by NOAA in the final BiOp, there are two important features specifically worth noting. First, the Action Agencies saw the benefits of continuing to work with other sovereigns on many issues, not least of which included each migration season's operation plan. Thus, the Proposed RPA supported the creation of an entity called the Regional Implementation Oversight Group ("RIOG") that would "oversee the implementation of the FCRPS BiOp . . . ." BA at 2-15.

Second, unlike the 2000 BiOp that included a set of 199 different actions as an RPA, the Action Agencies now have committed themselves to specific actions and improved survival performance standards. BiOp at RPA Table p.72 (RPA 51). This allows for the modification of operations or projects with the release of new science and data, but at the same time provides a floor that the Action Agencies must maintain. *Id.* For example, regardless of any particular operational configuration or structure, average dam survival must be maintained at current levels of survival or achieve "an average across Snake River and Lower Columbia River dams of 96% average dam passage survival for spring Chinook and steelhead and 93% average across all dams for Snake River subyearling Chinook." *Id.*

1. RIOG, Performance Standards, and the ISAB's New Report on Spill and Transport

The integration of these two features of the Proposed RPA is best illustrated by the recent release of the ISAB's report on spill and transport ("ISAB 2008-5").[3/] As discussed at the last status conference, NOAA sought input from the ISAB on its spill and transport proposal for 2009 Operations. *See* NOAA C1057. By way of background, the Action Agencies' proposed a spill operation that was very similar to the one the Court ordered in 2007. *See* BA at 2-30 to 2-33.

[3/] This document can be found on the Northwest Power Council's web site at: http://www.nwcouncil.org/library/isab/isab2008-5.pdf (last visited Oct. 23, 2008)

However, NOAA's COMPASS modeling indicated that Snake River steelhead, and in particular "B-Run Steelhead", return in greater numbers of adults if the juveniles are transported during the last two weeks of May than if the juveniles are allowed to remain in-river. NOAA S77 at 21-22. Further compounding this problem, the number of returning B-Run steelhead largely govern the number of SR fall Chinook that can be harvested by the Tribes. BiOp at 8.4-25. Because B-Run steelhead are migrating at the same time as fall Chinook, there is incidental by-catch, and because only a certain number of B-Run steelhead can be caught in a season without doing harm to the overall SR Steelhead distinct population segment ("DPS"), the number of migrating B-Run steelhead govern the length and timing of the fall Chinook Tribal harvest. BiOp at 8.5-4, 8.4-25 ("higher harvest rates are allowed only if the abundance of B-run steelhead is also greater than 35,000. This provision is designed to provide greater opportunity for the tribes to satisfy their treaty right, to harvest 50% of the harvestable surplus of fall Chinook, in years when conditions are generally favorable."). When NOAA examined COMPASS modeling runs it saw that the cessation of spill for two weeks in May would increase the number of SR Steelhead transported. NOAA S77 at 21-22. According to COMPASS, transportation, with additional actions, would increase the number of adult B-Run steelhead, which in turn would allow the Tribes to harvest more fall Chinook as contemplated under the new management agreement in *United States v. Oregon* and reflected in the 2008 Harvest BiOp. BiOp at 8.5-25 – 28. Put simply, increased transport increased the fall fishing opportunities for the Tribes, while at the same time benefitting the SR Steelhead DPS. *Id.* This is why NOAA's RPA differed from the Action Agencies' Proposed RPA in terms of spill and transport operations.

This was very controversial within the region, and accordingly NOAA sought ISAB review. On September 16, 2008, the ISAB released its review of the spill/transport operation. *See* ISAB 2008-5. The review was mixed. While the ISAB found NOAA's approach and data sound in that it incorporates the best available science and reflects a faithful application of COMPASS (a model

that the ISAB views very favorably), it was concerned that the cessation of spill for two weeks in May did not take into account concerns with adult returns for the 2006 and 2007 juvenile outmigration and advised NOAA that it should wait until more data were available before switching to this operation. ISAB 2008-5 at 3-4.

As contemplated, new information like this ISAB report will arise during the ten-year term of the BiOp. NOAA, as well as the Action Agencies, have reviewed this report and are committed to addressing this new information through the adaptive management provisions set forth in the BiOp. Declaration of Rock Peters ("Peters Decl.") at ¶ 16. Since the report was issued, the Action Agencies already have sought input of the region's Salmon Managers at a recent implementation team ("IT") meeting, and the research concerns were discussed at the October 23, 2008 Studies Review Workgroup ("SRWG") meeting. The issue will be discussed further with the other sovereigns at the RIOG meeting scheduled for October 29, 2008. At that meeting, the Action Agencies will listen to the other sovereigns to determine the best operational adjustment for 2009, while at the same time maintaining the agreed-upon performance standards and preserving the United States' treaty and other responsibilities to the Tribes.[4/]

[4/] Oregon suggests there will be a decrease in spill and flow as a result of 2009 FCRPS operations, yet notably fails to provide any citation or reference for its blanket statements (*e.g.* that there will be a 20% decrease in the amount of spill). OR Br. at 22. As explained above, one of the primary reasons for the proposed spill operation for the last two weeks of May is to increase the number of B-Run steelhead and thereby increase Tribal fishing opportunities, which Oregon fully supports in *United States v. Oregon*. *See United States v. Oregon,* 68-CV-513-KI (D. Or.), All Parties' Joint Motion and Stipulated Order Approving 2008-2017 *United States v. Oregon* Management Agreement (Doc. 254). Notwithstanding the inconsistent positions, by narrowly focusing on the *volume* of spill, rather than the *biological effect* of spill, Oregon misses the point. Spill and flow operations are designed to maximize survival, not the amount of water passing over the spillway. *See* Declaration of Ritchie Graves ("Graves Decl.") ¶¶ 12-15; Peters Decl. ¶20. Indeed, the narrow focus on volume rather than survival runs contrary to the ISAB and this Court's instruction. *See* Opinion and Order, December 29, 2005, at 16 ("The prevailing flow-augmentation paradigm, which asserts that in-river smolt survival will be proportionally enhanced by any amount of added water, is no longer supportable.") (quoting ISAB's *Review of Flow Augmentation: Update and*

2. The Analytical Framework for the Comprehensive Analysis

With the technical work that was done in the collaboration, the Action Agencies conducted one of the most robust analyses ever conducted for the ESA on the effects on salmon in the Columbia and Snake rivers. *See* NOAA B92. At the risk of oversimplification, to analyze comprehensively both the FCRPS and the Upper Snake, the Action Agencies aggregated the two actions and asked whether these effects were likely to jeopardize the 13 affected ESUs or adversely modify designated critical habitat. The Action Agencies did not differentiate between discretionary or non-discretionary aspects of operations; they did not differentiate between the environmental baseline and proposed action; and they did not differentiate between FCRPS and the Upper Snake. CA at 2-1 ("All impacts on the salmon and steelhead lifecycle are combined for the purposes of this analysis."). This analysis complies with the Court's instruction in *American Rivers*, and in many cases exceeds that direction.

The analytic framework for the Comprehensive Analysis used a step-wise adjustment of population-level metrics from a historical base period to current conditions, and then an adjustment from current conditions to expected future status. CA at 3-8. This commonly is referred to as the "Base to Current – Current to Prospective" analysis. This means that the Action Agencies first began with population level data and estimates of the average lifecycle survival over a historical period. *See e.g.*, CA 4-6 (explaining the base status for SR fall Chinook).[5/] Because this focused on average lifecycle survival, the analysis captured all sources of mortality whether that mortality

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Clarification.). In contrast, the approach the agencies take here focuses on survival of the species. Moreover, this operation is not static. As new information becomes available, the Action Agencies will adjust operations accordingly. It may be that 2009 operations will result in less spill volume, but that decision will only be made after consulting with the regional sovereigns, taking into account the United States' treaty and other responsibilities with the Tribes, and ensuring that the performance standards will be met or exceeded.

[5/] The SR fall Chinook ESU is used as an example throughout this brief, but the analyses for the other ESUs are very similar, if not identical.

occurred at the juvenile lifestage (*e.g.*, predation, migrating through the hydro system, hatchery effects) or at the adult lifestage (*e.g.*, ocean mortality). *See e.g.*, CA 4-5 (Table 4-2: Key limiting factors for SR fall Chinook). Thus, all sources of mortality throughout the lifecycle were taken into account regardless of cause.

Once this historical reference point was established, the average historical survival estimate was adjusted to reflect current conditions. *See e.g.*, CA at 4-9. After establishing the current survival estimate, the aggregated effects of the Proposed RPA combined with the effects of completed Federal projects that previously had undergone an ESA § 7 consultation and State and private actions that reasonably are certain to occur were factored into the prospective survival estimate.[6] CA at 4-14 – 4-15. The Action Agencies also presented this same information within the Conceptual Framework construct. CA at 4-15.

This analysis looks at salmon survival up until now (Base to Current), and anticipates how fish will do in the future as a result of the Action Agencies, States, and Tribe's collective efforts (Current to Prospective). This analytic framework is closely related to the analyses that were used in the 2000 FCRPS BiOp and it borrows extensively from the work and products of the Interior Columbia TRT ("ICTRT") products. CA at 3-8.

C. The Supplemental Comprehensive Analysis

When NOAA received the Action Agencies' FCRPS BA, Upper Snake BA, and the Comprehensive Analysis, it took all of these analyses, information, and actions (including the Proposed RPA) and improved upon them. Besides using updated ICTRT data sets, the most striking change was that NOAA added a third action to the SCA – an analysis of the ten-year harvest

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[6] NWF takes issue with NOAA's cumulative effects analysis. NWF Br. at 27 n.22. It appears that NWF neglected to examine the entire chapter on cumulative effects and the extremely thorough discussion of these effects that the Action Agencies compiled in the CA that reflects an analysis of both beneficial and detrimental effects throughout the basin. *See* CA (Chapter 17).

agreement in *United States v. Oregon.* SCA at 1.3 – 1.4. Mirroring the Comprehensive Analysis, NOAA did not distinguish between the three aggregated Federal actions and simply asked the collective question of whether these three actions, including the package of mitigation, was sufficient under ESA § 7(a)(2). *Id.* at 1.3. In order to complete this analysis, and while being faithful to the ESA regulations, NOAA developed the SCA, which is a reference document that includes the underlying analyses for each of the 13 listed species of salmon or steelhead as well as killer whales and green sturgeon. Each of the three biological opinions-- FCRPS; Upper Snake; and *United States v. Oregon*-- are tiered off of and incorporate the common SCA analysis. *Id.* at 1.4 ("the SCA is contemporaneous with NOAA Fisheries' Biological Opinions for all of these actions.").

D. The 2008 FCRPS Biological Opinion

1. NOAA's Jeopardy Analysis

During the remand, the Court in *American Rivers* instructed NOAA as to its view of the jeopardy standard by stating that: "the Action Agencies first priority must be to 'halt and reverse the trend toward species extinction, whatever the cost.'" May 23, 2006, Opinion and Order at 24 (citing *TVA v. Hill*, 437 U.S. 153, 184-85 (1978)). Shortly after this instruction was issued, NOAA issued the first of two memoranda explaining how it intended to conduct its jeopardy analysis. NOAA B343 at 1. However, NOAA made clear that, "if the 9th Circuit rules before new biological opinions are rendered, then the new opinions must necessarily apply the results of the appellate court's decision." NOAA B343 at 1.[7]

In order to address the deficiencies this Court identified in the 2004 FCRPS BiOp, NOAA recognized that it must address explicitly both survival and the prospects for recovery in its jeopardy

[7] NOAA further clarified that "the following discussion is intended to be illustrative, indicating the kinds of metrics and qualitative information that we currently believe to be useful and applicable, and are likely to be used in preparing the biological opinions." NOAA B344 at 1.

analysis. *Id.* at 2. The survival prong of the jeopardy analysis is fairly straightforward in that NOAA would "consider short term extinction risk using available metrics and other qualitative biological information." *Id.* at 3. However, the recovery prong of the analysis is more complicated. Based on the Court's decision in *American Rivers*, NOAA explained: "Judge Redden also has made clear that if an ESU is currently trending towards extinction, then NOAA must determine whether the effects of the proposed action (or RPA), when aggregated with the effects of other Federal actions and non-Federal activities, will reverse that trend and thereby contribute to recovery." *Id.* at 2 (citing *American Rivers v. NOAA Fisheries*).

In formulating this preliminary view, NOAA encountered a dilemma. On the one hand, it recognized that a "time span considerably longer than the ten year term of the proposed action" was necessary to achieve recovery, but on the other hand, it was equally cognizant that this Court had faulted NOAA's previous jeopardy analysis in the 2000 FCRPS BiOp for relying on future actions (beyond the term of proposed action) that were not reasonably certain to occur. *Id.* at 3; *see also* May 7, 2003 Opinion and Order (Doc. 396). NOAA explained: "basing a prediction of recovery on a time span exceeding the ten year term of the proposed action is not consistent with the Court's reading of the ESA consultation regulations, since at least some of the future Federal actions and non-Federal activities that are likely to be needed for recovery of listed species cannot be reasonably certain to occur or ripe for a §7(a)(2) consultation at this time." NOAA B343 at 3. NOAA was placed in the position of having to address recovery in its jeopardy analysis, yet at the same time, it could rely only on actions within the ten-year time frame (which is far too short for recovery). *Id.* Thus, it formulated this preliminary framework, the "trend to recovery" analysis. *Id.* ("Rather the objective within the ten year time frame of the proposed FCRPS action, under this interpretation of the jeopardy standard, is to start the ESU's in the direction toward recovery if they are not already so started.").

During preparation of the final 2008 FCRPS BiOp, the Ninth Circuit issued its opinion in this case. *NWF v. NMFS*, 524 F.3d 917 (9th Cir. 2008) ("*NWF v. NMFS*"). While the Ninth Circuit affirmed this Court in many respects, it addressed also the parameters of a proper jeopardy analysis, as well as the obligation to address recovery within those parameters. *Id*. at 930-933. In announcing this standard, the Ninth Circuit made clear that a degraded baseline is not enough; there must be some volitional action by the agency that further harms the species or ESU before it can be said to result in jeopardy. *Id.* It explained the suffix "-ize" must mean there is an action, and that action "can only 'jeopardize' a species' existence if that agency causes some deterioration in the species' pre-action condition." *Id.* at 930. And, importantly, it recognized that an agency still may take an action, "that lessens the degree of jeopardy," i.e., lawful agency action does not need to recover the species. *Id.*

The Ninth Circuit also clarified that the recovery prong is just one aspect of the broader jeopardy inquiry. This means that when NOAA analyzes the effects on recovery, the base question remains the same – does the action cause "some deterioration in the species' pre-action condition" or "deepen[] the jeopardy by causing additional harm." *Id.* To read these two obligations consistently, the Ninth Circuit did not impose any substantive obligation on the recovery inquiry. Rather, it left the manner in which to evaluate the prospects for recovery to NOAA's discretion. *Id.* at 933 ("NMFS must conduct a full analysis of those risks and their impacts on the listed species' continued existence."); *see also Lands Council v. McNair*, 537 F.3d 981, 993 (9th Cir. 2008) (*en banc*) (only "procedural requirements . . . explicitly enumerated" can be imposed by courts) (quotation omitted).

The Ninth Circuit also reaffirmed that even though the inquiry under 50 C.F.R. § 402.02 must address survival and recovery, it is still a "*joint* survival and recovery concept." *NWF v. NMFS* at 932 (quoting "Interagency Cooperation" 51 Fed. Reg. 19,926, 19,934 (June 3, 1986)) (emphasis in the original); *see also id.* at 932 n.11 ("We recognize that 'these concepts are generally considered

together in analyzing effects, and it is difficult to draw clear-cut distinctions.'") (quoting 51 Fed. Reg. at 19,934). While recognizing the nature of this intertwined inquiry, the Circuit also noted that in "*exceptional circumstances*", injury to "recovery prospects alone could result in a jeopardy finding." *Id.* at 932. In reconciling these two points, the Ninth Circuit cited with approval the "adequate potential for recovery" standard used in prior BiOp's. *Id.* at 932. This is the same standard Judge Marsh upheld in *American Rivers v. NMFS*, 96-CV-384-MA (D. Or.), and that was used in the 2000 FCRPS BiOp. NOAA B302 at 1-8. Ultimately, the Ninth Circuit did not specify that NOAA must determine when the species would achieve recovery, nor did it specify that a certain growth rate or abundance level must be deduced; it asked NOAA only to "simply provide[] some *reasonable assurance* that the agency action in question will not appreciably reduce the odds of success for future recovery planning, by tipping a listed species too far into danger." 524 F.3d at 936 (emphasis added).

a. Application of NOAA's Jeopardy Analysis

For the 2008 FCRPS BiOp (as well as analyses in the SCA), NOAA built upon the same general analytical framework that was used in the 2000 FCRPS BiOp and the products that were developed in the collaboration: (1) "ESU by ESU" approach; (2) "Base to Current / Current to Prospective" adjustment framework; and (3) "Population – Major Population Group – ESU Roll-Up."[8/] Within this framework, NOAA analyzed the survival and recovery prongs in its jeopardy analysis. *See* BiOp at 1-10 – 1-14 (explaining the five-step process for analyzing each of the ESUs); *see also id.* at 1-10 ("Determine (a) whether the species can be expected to survive with an adequate potential for recovery (e.g. trending toward recovery) under the effects of the action, the effects of

[8/] A detailed explanation of the Roll-Up is located in the BiOp at 7-49 - 7-51. An example of the specific application can be found for SR Spring/Summer Chinook, BiOp at 8.3-27 - 8.3-39 (summarizing major population group ("MPG") level effects) and BiOp at 8.3-39 - 8.3-45 (recovery and survival prong conclusions at the ESU level).

the environmental baseline, and any cumulative effects . . . .").

As part of this process, NOAA began with explicit consideration of the ICTRT abundance thresholds and other viability criteria for each of the ESUs.[9] For example, for SR fall Chinook, NOAA found "[t]he average abundance (1,273) of SR fall Chinook over the most recent 10-year period is below the 3,000 natural spawner average abundance thresholds that the ICTRT identified as a minimum for recovery." BiOp at 8.2-3. In defining the biological requirements and the current status of each ESU, NOAA used the ICTRT products as a point of reference to aid in the development of the RPA and the recovery inquiry. *See id.* at 8.2-5 ("The ICTRT recommends that no fewer than 2,500 of the 3,000 natural-origin fish be mainstem Snake River spawners."). But consideration of this information did not supplant the jeopardy determinations, or result in a formulaic prediction of future abundance levels necessary to achieve recovery. *Id.* at 8.2-29 ("increased productivity will result in higher abundance, which in turn will lead to an eventual decrease in productivity due to density effects, until additional improvements resulting from [the] recovery plan implementation are expressed. However, the survival changes resulting from the Prospective Actions and other continuing actions in the environmental baseline and cumulative effects will ensure a level of improvement that results in the ESU being on a trend toward recovery."). Rather, NOAA properly considered this information to inform the consultation, but did

[9] Viability is not the jeopardy threshold. Rather, in this context, it is synonymous with recovery. This is an important distinction that Plaintiffs attempt to blur. According to the Technical Recovery Teams ("TRTs"), a viable population is a population that has less than a five percent chance of going extinct over 100 years. If a species attains this biological threshold, and the statutory listing threats have been addressed, it has recovered, and recovery under the ESA typically is accompanied by a delisting decision. 16 U.S.C. § 1533(a)(1). Thus, when the various parties refer to "viability", "viable population" or a "viable ESU", they are talking about something that has recovered to the point where it no longer needs the protections of the ESA. *Id.*; *see also Spawing Salmon & Recovery Alliance v. Lohn*, No. C06-1462RSL, 2008 WL 782851, at *6-7 (W.D. Wash. Mar. 20, 2008), appeal pending (rejecting the argument that NOAA's concept of "viability" was the appropriate standard for determining compliance with the ESA).

not use it as an end in itself.

Embedded within this analysis, NOAA makes some key assumptions as to conditions for the next ten years. Perhaps most importantly, NOAA assumed that the ocean conditions that prevailed during 1980-1999 (base period) would be similar during the next ten years. BiOp at 7-13. This is significant because the base period ocean conditions were largely unfavorable for salmon survival. *Id.* ("The choice of a 1980-2001 base period largely addresses this concern [climate change] because it is dominated by El Nino and warm PDO events, representing climatic conditions expected to increase in the future."). This was a conservative assumption because NOAA assumed conditions far worse than what is expected to actually occur for the next ten years. Indeed, ocean conditions recently have become more favorable indicating that NOAA's estimates throughout the entire BiOp err on the side of being overly pessimistic and give the benefit of the doubt to the species. *Id.* at 7-13.

i. *Survival Prong of the Jeopardy Analysis*

On the survival prong, NOAA used quantitative information where it could, and where the data was lacking, used a qualitative approach to inform its survival decision. For the quantitative analysis, NOAA includes an assessment of survival gaps that, if filled, would result in a five percent risk of extinction over 24 years. BiOp at 7-14. This approach is consistent with the approach that was used in the 2000 FCRPS BiOp. NOAA B302 at 1-13 (2000 BiOp at 1.3.1.2.1). The information that helped inform this analysis included: the results of quasi-extinction risk modeling and other quantitative metrics used in the analysis, including measures of recent abundance and recruit-per-spawner ("R/S") productivity; median annual rate of population growth, or lambda (the same measure used in the 2000 BiOp); and trends in abundance of natural-origin adults (the same measure used by NOAA's Biological Review Team ("BRT") in its periodic status assessments). BiOp at 7-14 – 7-20. NOAA also relied upon a number of qualitative considerations, including the presence of hatchery safety net and/or supplementation programs, whether limiting factors are being

addressed, and the likely effectiveness of monitoring and adaptive management measures. BiOp at 7-34 - 7-35.

NOAA used a 24-year time frame rather than a 100-year time frame because a 100-year timeframe is not tethered to the true question of whether each ESU will survive over the course of the BiOp. *Id.* at 7-18 ("NOAA Fisheries continues to rely primarily on the 24-year time horizon for this analysis because the main purpose of the metric is to inform our judgment regarding the ability of the species to survive while actions to promote recovery are implemented under the Prospective Actions and through other processes.").[10/]

ii. Recovery Prong of the Jeopardy Analysis

Like survival, the recovery prong evaluated both quantitative and qualitative information to determine whether there was an adequate potential for recovery. This evaluation incorporated the best available science and data from recent recovery plans and the ICTRT's recommendations on goals and gaps for long-term recovery. *See e.g.*, *id.* at 7-22 ("all four VSP characteristics relate to the recovery prong of the jeopardy analysis."); *id.* ("only the (ICTRT) estimates of average R/S were used in the SCA calculations for the jeopardy analysis."); *id.* at 7-24 ("the ICTRT staff provided an updated summary of their average lambda estimates (Cooney 2008b, c)."); *id.* at 7-26 ("The methods NOAA Fisheries used [for BRT trend] are identical to the BRT's methods and the data used in the

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[10/] Using a 100-year time frame increases the uncertainty to the point where the modeling becomes less reliable. BiOp at 7-18 ("It has been equally well-documented that the precision of the risk estimate decreases with longer time horizons. For example, Fieberg and Ellner (2000) estimated that reliable estimates of extinction risk may only be possible when the number of base period observations is 5-10 times greater than the number of years in the time horizon."). Further, using a 100-year time frame answers the question of whether the ESUs will be viable (or recovered to the point of delisting), not whether they will survive for the next ten years. Even so, and despite arguments to the contrary, NOAA also estimated the extinction risk over a 100-year timeframe and presented these results in the Aggregated Analysis Appendix for a comparison to the 24-year estimates. *Id.* at 7-18.

detailed population data set provided by the ICTRT."). Similarly, the Conceptual Framework and the information developed within the collaboration also was used as an additional metric to evaluate recovery.[11/] *Id.* at 7-27 ("NOAA Fisheries does not consider the apportionment of survival gap responsibility of Step 4 of the Collaboration Framework to be relevant to a jeopardy analysis. Nonetheless, [NOAA] presents results of a Step 4 analysis in the Aggregate Analysis so that they can be compared with the alternative goal.").

The use of multiple metrics and recent ICTRT data is a strength of the 2008 BiOp, as compared to the 2000 BiOp. By using different metrics and considerations, NOAA is able to achieve a more reliable prediction as to the likely effect of the RPA in the foreseeable future. *Id.* at 7-20 ("The three metrics considered to evaluate the potential for recovery for the jeopardy analysis have different strengths and weaknesses, particularly with respect to the most recent returns included in the analysis, the treatment of hatchery-origin fish, and the level of complexity (number of assumptions) and data requirements."). The use of multiple metrics, as well as qualitative factors, is consistent with the best available science. *Id.* ("NOAA Fisheries looks at all available tools because the Independent Scientific Advisory Board recommended that policy-makers draw on all available analytical tools (ISAB 2001a).").[12/]

[11/] Plaintiffs' claims that Federal Defendants "abandoned" the conceptual framework are without merit. NWF Br. at 16; OR Br. at 13. The Conceptual Framework information was completed by the Action Agencies in the CA. *See e.g.* CA at 5-24 (for Spring Chinook); *id. at* 7-20 (for SR Steelhead); CA at 8-16 (for UC Spring Chinook); CA at 9-19 (for UC Steelhead). NOAA explicitly considered this information as an additional metric in the recovery inquiry. BiOp at 7-27.

[12/] For the populations that had data, NOAA applied the following metrics: (1) 10- and 20-year geometric means of natural R/S; (2) 12- and 20-yr lambda estimates abundance trends using the BRT; and (3) life-stage survival information, *e.g.*, juvenile reach survival estimates, as indicators of improvement in limiting factors and threats. BiOp at 7-22 – 7-28. With these metrics, a trend toward recovery is indicated when a metric, such as R/S productivity, is greater than 1.0. *Id.;* CA at 3.1.2.4. This means that the population is, on average, replacing itself and growing in size. Conversely, these metrics also demonstrate the point at which recovery for a population is placed

b. ESU Jeopardy Determinations

Each of the 13 ESU conclusions are detailed in the SCA and the respective BiOps. *See e.g* BiOp at 8.2-3 – 8.2-38 (SR fall Chinook ESU determination). For the six ESUs that had data to support a quantitative analysis, NOAA concluded that there was a low short-term extinction risk and that each of the ESUs will trend towards recovery. *Id.* at 8-3. For the remaining ESUs that lacked the necessary quantitative data, NOAA concluded that the ESUs are expected to survive with an adequate potential for recovery. *Id.* Based on these factual determinations, NOAA determined that the RPA, when aggregated with the environmental baseline and cumulative effects, was not likely to jeopardize the continued existence of each of the 13 affected ESUs.

2. The Critical Habitat Analysis

Like other aspects of the BiOp, the critical habitat approach was vetted through the collaboration process. *See e.g.,* NOAA C27, C32. At a January 2006 PWG meeting, NOAA first presented the critical habitat framework to be employed in the 2008 BiOp.[13] *See* NOAA C61 at 211-216. This framework is based on internal NOAA guidance concerning the proper application of the ESA § 7 "adverse modification" standard. *See* NOAA B333 ("the Hogarth memo"). The memo directs NOAA to identify the current condition of the primary constituent elements ("PCEs") of each critical habitat designation before examining how a proposed action will affect the function and

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at risk. If the metrics indicate that the population is performing at slightly less than 1.0, its potential for recovery is diminished because the population is not replacing itself – the population size is declining rather than growing and therefore is at risk. BiOp at 7-22.

[13] Notably, there was little controversy or discussion concerning this approach, as evidenced by lack of discussion in the meeting notes. NOAA C61 at 1-12.

conservation role of each PCE.[14/] *Id.* The focus of the analysis is whether, after implementation of the proposed action, critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve the intended conservation role for the species. *Id.* at 2-3.

NOAA's approach to the "adverse modification" standard was again put before the collaboration parties as part of the July 12, 2006 Lohn Memo. *See* NOAA B343 at 3-4. NOAA stated that the effects of the action would be analyzed from the perspective of their impact on the current status and functionality of the PCEs of the critical habitat designation. *Id.* Short-term impacts on PCEs must be evaluated in the context of the species migratory patterns and life cycle. *Id.* The proposed action would avoid adverse modification of designated critical habitat if that habitat remains functional (or retains the current ability for the PCEs to become functionally established) to serve the intended conservation (i.e., recovery) role for the species. *Id.*; BiOp at 7-52. Because initial designation of critical habitat focuses on the value of habitat for a species' conservation, this is also the guiding factor in assessing destruction or adverse modification in the ESA § 7 context. BiOp at 7-51. Applying this analysis, NOAA reasonably concluded that the aggregate effects of the environmental baseline, cumulative effects, and the proposed action on the PCEs of designated critical habitat is not likely to result in adverse modification or destruction of critical habitat.

E. The Columbia Basin Fish Accords

For two decades, litigation among the various stakeholders involved in salmon issues has been a near constant. For the first time, however, through this Court's ordered remand process, Federal Defendants and most sovereigns worked towards and found common ground. Most notably, the

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[14/] PCEs are those elements of a critical habitat designation deemed essential for the conservation of the listed species and are described as the sites and habitat components that support one or more life stages. BiOp at 3-5.

parties were able to achieve the Columbia Basin Fish Accords, historic agreements that provide actions with identified benefits and secure financial commitments, ensuring a path to salmon recovery and resolving the parties' underlying legal issues.[15/]

The Fish Accords were executed among BPA, BOR, the Corps, and the States of Idaho and Montana, as well as the Warm Springs, Umatilla, Yakama, and Colville Tribes.[16/] Although all of the specific provisions are too numerous to detail, several points bear discussion. *See* SCA at 11-3 - 11-8. With respect to hydro operations, the parties affirmed the BiOp's specified performance standards, but clarified how these standards would be considered in relation to other performance indicators such as spill passage efficiency and delay. Corps 00013 at 000171. The parties also agreed that summer spill operations should be modified so that curtailment of spill occurred when the count of fish at Lower Granite dam fell below 300 fish (as opposed to 1,000 fish) for three consecutive days, and staggered accordingly thereafter at the downstream projects. Corps 00372 at 005356. And if fish counts revealed 500 fish per day for two consecutive days, spill would resume. *Id.* For flow, the parties agreed upon additional actions to improve forecasting methods. *Id.* at 005358. It also was agreed that BPA and the Corps would coordinate with the signatory Tribes about annual operations under the Treaty with Canada as well as the use of non-Treaty storage. *Id.*

[15/] The Fish Accords are broader in scope than just salmon. They include important mitigation for resident species (listed and unlisted). All of the Fish Accords documents can be found in the administrative record, *see* Corps 00372 (Treaty Tribe Memorandum of Agreement ("MOA")); 00380 (Montana MOA); 00404 (Idaho MOA); 00397 (Colville MOA), as well as the Action Agencies' Record of Decisions ("ROD's") which discuss how the Fish Accords aid in complying with their substantive ESA § 7(a)(2) obligation. *See* Corps 00026 (Corps ROD); 00013 (BPA ROD); BOR 00005 (BOR ROD).

[16/] A fifth Accord with the Shoshone-Bannock Tribe has also been proposed. The public comment period on this proposed agreement closed on October 20, 2008, *see* http://www.bpa.gov/applications/publiccomments/OpenCommentListing.aspx (last visited Oct. 23, 2008). Parties to the proposed Accord are expected to make a decision soon whether or not to proceed.

Habitat actions also figured prominently in the Fish Accords. The parties committed to projects that will improve spawning and rearing habitat thereby increasing productivity of specific populations. Corps 00403 at 8. The benefits associated with these projects were largely derived from the tributary habitat methodology developed in the collaboration. *Id.* at 9. Although the habitat projects beyond 2009 cannot be fully identified yet down to the contract-specific site or work order, habitat projects including type, location, and implementer, as well as their secured budgets for a decade, are identified in the Accords. *See e.g.,* Corps 00403 at 007802; Corps 00372 at 005393-005395. The Fish Accords provide financial certainty that implementation will be achieved.[17/]

STANDARD OF REVIEW

"Because ESA contains no internal standard of review, section 706 of the Administrative Procedure Act, 5 U.S.C. § 706 ("APA"), governs review of the Secretary's actions." *Village of False Pass v. Clark,* 733 F.2d 605, 609 (9th Cir. 1984). The scope of APA review is limited to holding unlawful and setting aside agency action found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). In areas requiring a "high level of technical expertise", courts are required to be "most deferential" to an agency's determinations. *Lands Council v. McNair*, 537 F.3d 981, 993 (9th Cir. 2008) (*en banc*) ("We are to be 'most deferential' when the agency is 'making predictions, within its [area of] special expertise, at the frontiers of science.") (citations omitted). Recently, the unanimous *en banc* Ninth Circuit noted that

[17/] Due to the close proximity of the execution of these agreements and the deadline for issuing the 2008 FCRPS BiOp, NOAA was not able to quantify the effects that will result from the Fish Accords. Rather, NOAA qualitatively analyzed the various actions, in particular the habitat funding commitment, and found that there would be significant beneficial effects. SCA at 11-3, 11-8 ("The Tribal and State MOAs make commitments of operations and funding that, in general, will have beneficial effects for ESA-listed fish and, in some instances will have significant beneficial effects.").

prior environmental jurisprudence had drifted away from this deferential standard of review, and sought to correct that mistake. *Id.* at 988 ("Lands Council asks this court to act as a panel of scientists . . . But Land's Council's arguments illustrate how, in recent years, our environmental jurisprudence has, at times, shifted away from the appropriate standard of review and could be read to suggest that this court should play such a role."). Accordingly, where as here, the challenges are to agency scientific findings and conclusions within the area of the agency's special expertise, this Court must be at it most deferential. *Id.* at 993.

ARGUMENT

The 2008 FCRPS BiOp is one of three biological opinions that rest upon the same analytical foundation: the SCA. The package of mitigation that was developed and analyzed in the SCA was not designed solely to mitigate for the effects of FCRPS. Because all three Federal actions were analyzed together, the suite of measures in all three BiOps is designed to mitigate for the effects of all three Federal actions. This means that each ESU determination made in the SCA (and reflected in each of the three BiOps) is based on the collective mitigation package. The nature of this comprehensive analysis makes the State of Oregon and the Nez Perce Tribe's positions in the present litigation surprising.

While running through a litany of grievances against the analysis in the FCRPS BiOp, Oregon neglects to inform the Court that it actually supports the same analysis, albeit in Judge King's courtroom for the harvest BiOp in *United States v. Oregon.* Oregon provides no explanation as to how it affirmatively can support the management agreement *United States v. Oregon,* and yet disparage the same exact analysis in a different courtroom.[18/] It seems Oregon is satisfied with

[18/] In prior litigation, Oregon, as well as other States, urged this Court to require the United States to obtain a valid BiOp prior to entering into a harvest management agreement. *See United States v. Oregon*, 68-CV-513-KI, Sept. 3, 1998 Opinion and Order at 3 ("On September 1, 1998, the State[] of Oregon . . . filed a memorandum opposing the stipulated agreement attacking the manner in which

NOAA's analysis when it comes to fishing, but not when it comes to hydropower.

The Nez Perce Tribe is equally forgetful. It also fully supports the 2008 Harvest BiOp and the harvest management agreement in *United States v. Oregon*. In addition, it also fully supports the operational regime for the Upper Snake for ESA purposes. *See* NPT Br. at 2 n.2. It seems the Nez Perce Tribe supports the SCA's analyses in two of three forums, but just not here. Federal Defendants do not raise this to improperly import *United States v. Oregon* into these proceedings, but these glaring inconsistencies and Oregon and the Nez Perce's inexplicable silence on this issue stand in stark contrast to the strident tone they take criticizing this BiOp.

For their part, the NWF plaintiffs continue with their customary refrain – nothing has changed. NWF's challenge willfully ignores the significant improvements that have occurred in the past and those that will occur in the future. Indeed, on this score, they relegate the Fish Accords to a mere footnote. During the prior remand, NWF repeatedly chastised the Federal agencies for allegedly changing the required ESA legal analysis in the 2004 FCRPS BiOp and their view was

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the agreement was reached and asserting that no fishing season determined through the [CRFMP] process should be allowed to proceed without a biological opinion."). On September 3, 1998, Judge Marsh accepted Oregon's argument and required the United States to prepare a BiOp before it could submit the management plan to that Court for approval. *Id.* at 6-10. In accordance with the *U.S. v. Oregon* Order, NOAA prepared the 2008 Harvest BiOp, which is tiered from the SCA and utilizes the same jeopardy analysis and analytical framework present in this case. On August 11, 2008, Oregon signed a joint motion acknowledging that NOAA had prepared a valid 2008 Harvest BiOp, thus meeting Judge Marsh's condition for approval. *See United States v. Oregon*, 68-CV-513-KI, All Parties' Joint Motion and Stipulated Order Approving 2008-2017 *United States v. Oregon* Management Agreement at 3, 5 (Docket No. 2546). Because all of the parties were in agreement and because the necessary condition of preparing a BiOp was complete, Judge King granted the joint motion and signed the proposed order. *Id.* at 6-7 ("The Court concludes that the 2008-2017 *United States v. Oregon* Management Agreement is fundamentally fair, adequate, and reasonable, both *procedurally and substantively*, in the public interest, and consistent with applicable law, and that it has been negotiated by the parties in good faith.") (emphasis added). Yet, despite signing this pleading and representing to Judge King that the harvest management agreement is procedurally and substantively valid, Oregon now asserts this same analysis in the SCA is deficient. Oregon cannot credibly maintain these conflicting positions.

upheld by this Court. But now, it is NWF that attempts to cobble together a fabricated standard untethered to the requirements of the ESA; one that, if accepted, places NOAA in the untenable position of not being able to comply with prior case law. Forever moving the goal posts in an ESA consultation ensures that only one thing is reasonably certain to occur – perpetual litigation. NWF's attempt to impose their idea of a jeopardy standard, particularly one that runs counter to the ESA, its implementing regulations, and NOAA's faithful interpretation and application of the ESA and this Court's orders, should be rejected.[19]

I. NOAA'S JEOPARDY ANALYSIS, INCLUDING THE CONSIDERATION OF RECOVERY, IS ANALYTICALLY SOUND AND ADHERES TO THE NINTH CIRCUIT'S INSTRUCTION.

Oregon, the Nez Perce Tribe, and NWF ("Plaintiffs")[20] all challenge NOAA's jeopardy

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[19] The Supreme Court has "always insisted on strict compliance with th[e] jurisdictional standing requirement," *Raines v. Byrd*, 521 U.S. 811, 819 (1997)), and the Ninth Circuit has confirmed that it "cannot simply presume" that a plaintiff has satisfied the Article III standing requirements, *People for the Ethical Treatment of Animals v. U.S. Dep't of Health & Human Servs.*, 917 F.2d 15, 17 (9th Cir. 1990). NWF indicated that it would be submitting standing declarations, as it must. *See Prasco, LLC v. Medicis Pharm. Corp.*, 537 F.3d 1329, 1337 (Fed. Cir. 2008). Nonetheless, Plaintiffs inexplicably have failed to demonstrate standing "with the manner and degree of evidence required at the successive stages of the litigation." *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992). The fact that Plaintiffs submitted standing affidavits in earlier iterations of this litigation does not obviate the need to do so now. *See Rockwell Int'l Corp. v. United States*, 127 S.Ct. 1397, 1409 (2007) (where a plaintiff voluntarily has filed a superceding complaint, courts look to the superceding complaint, and the claims raised therein, to determine jurisdiction); *Ferdik v. Bonzelet*, 963 F.2d 1258, 1262 (9th Cir. 1992) (same). Indeed, NWF previously has not raised claims with respect to the Clean Water Act or the Southern Resident killer whales; thus, at a minimum, it would be wholly improper to presume that NWF can satisfy the Article III standing requirements with respect to these newly raised claims. *Valley Outdoor, Inc. v. City of Riverside*, 446 F.3d 948, 952 (9th Cir. 2006) (standing is evaluated "on a claim-by-claim basis"). Accordingly, unless Plaintiffs make the requisite standing showing for each claim in the Fifth Supplemental Complaint, this Court lacks jurisdiction and must deny Plaintiffs' motion for summary judgment.

[20] For ease of reference, Federal Defendants refer to these entities as Plaintiffs even though the Nez Perce Tribe participates in this action only as *amicus*. In general, *amicus* should not raise separate arguments that the parties choose not to assert. *See United States v. Gementera*, 379 F.3d 596, 607 (9th Cir. 2004) ("Generally, we do not consider on appeal an issue raised only by an amicus.") (quoting *Swan v. Peterson*, 6 F.3d 1373, 1383 (9th Cir.1993)).

analysis for virtually all the same reasons. They collectively assert that NOAA's evaluation in the FCRPS BiOp and SCA does not answer the fundamental question of whether the RPA and Fish Accords "reduce appreciably the likelihood of both survival and recovery . . . ." and suggest an alternative standard that is neither reflected in the regulations nor case law. While Plaintiffs are forced to recognize that NOAA explicitly considered recovery and has considerable discretion to formulate its own evaluation of the recovery prong, they nevertheless contend that NOAA's analysis is deficient because it did not adhere to *their* proposed formulation of a recovery evaluation. NWF Br. at 9-20; OR Br. at 7; NPT Br. at 9. In addition, Plaintiffs further contend that NOAA failed to incorporate ICTRT products into the recovery evaluation, and that this purportedly marked a departure from the analysis that was done in 2000 without any explanation.

These criticisms are without merit. First, nothing in the statute, regulations, or case law requires NOAA to determine the time frame or growth rate for achieving recovery in an ESA § 7(a)(2) consultation. This is purely Plaintiffs' own creation.[21/] As to the ICTRT criticisms, contrary to Plaintiffs' claim, NOAA evaluated and incorporated many ICTRT products into its analysis. *See supra* Background II.D.1.a.ii. Indeed, many of the data sets and assessments that Plaintiffs accuse

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[21/] Plaintiffs' new approach to the recovery inquiry here is a sharp departure from the standard they have urged in the past. Indeed, in their briefing before the Ninth Circuit both Oregon and NWF presented a much different interpretation of the consultation regulation; yet here provide no explanation of why they seek to depart with their past position. *See* Ninth Cir. Oregon Br. 2005 PI at 25 (Fed. Defs.' Ex. 1) ("Ultimately, *impairment* of the *potential* for recovery must be considered when evaluating jeopardy, just as impairment of the potential for recovery must be considered when evaluating degradation of critical habitat.") (emphasis added); *see also* Ninth Cir. NWF Br. 2005 PI at 36 n.19 (adopting Oregon's position) (Fed. Defs.' Ex. 2) . In this consultation, NOAA clearly has considered whether the RPA will result in the impairment for the potential for recovery. Moreover, the Action Agencies have far exceeded this standard by implementing an action that *increases* the potential for recovery. If an action increases the potential for recovery, it cannot be said to "impair."

NOAA of "cherry-picking" were taken straight from the updated ICTRT data sets. Finally, NOAA also explained why it could not utilize the 2000 FCRPS BiOp recovery analysis in the present consultation as doing so would run afoul of this Court's prior instruction to avoid relying on future recovery actions that are not reasonably certain to occur.

A. Requiring NOAA to Specify the Time Frame for Recovery and Required Growth Rate Conflicts With Other Statutory Provisions of the ESA and Consultation Regulations

Plaintiffs use the Ninth Circuit's language – "roughly at what point survival and recovery will be placed at risk" – to assert that a valid ESA § 7(a)(2) consultation must provide a specific time frame and objective criteria (like a population growth rate) for achieving recovery within that timeframe. NWF Br. at 10. The Ninth Circuit's decision does not support this. Such a standard, in fact, far exceeds any case law, impermissibly imports recovery planning into the consultation process, and if accepted, would require NOAA to develop new science contrary to the provision in ESA § 7(a)(2) to use the best *available* science.

Congress made clear that NOAA is required to determine (to the extent practicable) how and when recovery will be achieved *in developing recovery plans*, not, as Plaintiffs suggest, in a jeopardy or adverse modification determination. ESA § 4(f) provides in pertinent part:

> The Secretary, *in developing and implementing recovery plans*, shall, to the maximum extent practicable –
> * * * *
> (B) incorporate in each plan –
>
> > (i) a description of such site-specific management actions as may be necessary to achieve the plan's goal for the conservation and survival of the species;
> >
> > (ii) *objective, measurable criteria* which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list; and
> >
> > (iii) *estimates of the time required . . . needed to achieve the plan's goal* and to achieve *intermediate steps toward that goal*.

16 U.S.C. § 1533(f)(1) (emphasis added). This statutory language indicates that Congress wanted NOAA to develop objective criteria (like population growth rates or abundance) and a time frame for achieving recovery as two necessary components in developing a recovery plan. *Id.* This explicit language also demonstrates that Congress contemplated such specific requirements, but ultimately chose not to import these requirements into the consultation process under ESA § 7(a)(2). 16 U.S.C. § 1536(a)(2). These two distinct statutory provisions exemplify the Congressional intent that recovery planning , § 4(f), and consultations, § 7(a)(2), remain two separate endeavors.

This point could not have been made more clear by the Ninth Circuit. Although it recognized that NOAA must evaluate recovery, it did not require NOAA to import these explicit recovery planning criteria into the consultation process. *See NWF v. NMFS*, 524 F.3d at 936 ("Requiring some attention to recovery issues does not *improperly* import ESA's *separate* recovery planning provisions into the section 7 consultation process.") (emphasis added). Instead, the Ninth Circuit clarified that an analysis of recovery within the broader question of jeopardy "simply provides some reasonable assurance that the agency action in question will not appreciably reduce the odds of success for future recovery planning, by tipping a listed species too far into danger." *Id.* Plaintiffs here, however, unquestionably seek to import at least the latter two recovery planning criteria, if not all three, into the consultation process.

Plaintiffs' interpretation also violates basic notions of statutory construction. As the Supreme Court recently stated, "a negative inference may be drawn from the exclusion of language from one statutory provision that is included in other provisions of the same statute." *Hamdan v. Rumsfeld*, 548 U.S. 557, 578 (2006) (citing *Russello v. United States*, 464 U.S. 16, 23 (1983) ("'[W]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.'")). Congress obviously considered it desirable to require objective criteria and a time

frame for recovery planning. However, it decided to have NOAA address these considerations in a recovery plan context. 16 U.S.C. § 1533(f)(1). It could have required NOAA to address these considerations in a consultation process, but consciously chose not to do so. *See* 16 U.S.C. § 1536. Plaintiffs' reading mixes these two distinct statutory provisions, running afoul of the construct that Congress is presumed to have purposely excluded these statutory requirements.

This is not the first time parties have sought to import improperly the recovery planning criteria into other ESA statutory provisions. In *Arizona Cattle Growers' Ass'n v. Kempthorne*, 534 F. Supp. 2d 1013 (D.Ariz. 2008), the litigants sought to invalidate a critical habitat designation, in part, on the basis that the U.S. Fish and Wildlife Service ("FWS") allegedly failed to determine the point at which recovery would be attained before establishing what features were essential for the species conservation. *Id.* The court was not persuaded by this argument.[22/] *See Arizona Cattle Growers'*, 535 F. Supp. 2d at 1025 ("While tempting in its logical simplicity, the Court is unconvinced that one cannot move forward with a conservation effort without first identifying that precise point at which conservation will be achieved."). The court found that requiring FWS to determine or provide objective criteria for recovery before designating critical habitat would import improperly the recovery planning process into this separate statutory provision. *Id.* at 1026 ("The Court presumes, therefore, that Congress, by requiring the inclusion of 'objective, measurable criteria' specifying the point of conservation in one ESA section, while excluding it from another, acted intentionally."). Similarly, in *Home Builders Ass'n of N. California*, the litigants asserted that FWS must first determine the point of recovery before examining the PCE's. *Home Builders Ass'n of N. California v. U.S. Fish and Wildlife Serv.*, No. CIV-S-05-629 WBS-G, 2006 WL 3190518

[22/] The litigants in this case relied in part on statements in *Home Builders Ass'n of N. California v. FWS*, 268 F. Supp. 2d 1197, 1214 (E.D. Cal. 2003), that this particular court found unpersuasive as its reasoning was not grounded in any authority.

(E.D.Cal. Nov. 2, 2006), *modified on other grounds*, 2007 WL 201248 (E.D. Cal. Jan 24, 2007). Here again, the court rejected this strained reading. *Id.* at 18 ("Thus, in the context of recovery plans, the ESA contains a requirement that the FWS incorporate in their recovery plan the objective, measurable criteria that will indicate when conservation has been achieved. The lack of a similar provision in the context of critical habitat designation indicates that Congress did not intend to require conservation criteria to be determined at that stage or in that context.").

Closer to home, Plaintiffs' tack recently was attempted and rejected in a challenge to the harvest management agreement and BiOp in *United States v. Washington*. *See Salmon Spawning Recovery & Alliance v. Lohn*, No. C06-1462RSL, 2008 WL 782851 (W.D. Wash. Mar. 20, 2008) (appeal pending). Among the many challenges, these litigants asserted that NOAA did not use properly the TRT products and that the jeopardy standard impermissibly considered a threshold lower than "viable." *Id.* at *8, 12 ("NMFS's derivation of a 'viable' population does not seek recovery, but seeks only to maintain a depressed population under 'current habitat carrying capacity.'") (quoting plaintiffs' brief). Like here, NOAA explained in the Puget Sound BiOp that "viable and critical thresholds in the context of this evaluation are a level of spawning escapement *associated with rebuilding to recovery* . . . For most populations, these thresholds are well below the escapement levels associated with recovery, *but achieving these goals under current conditions is a necessary step to eventual recovery* . . . ." *Id.* at *13 (emphasis in the original); *compare* BiOp at 7-26 – 7-27; *see also* Resp. Comments at 3 ("The ICTRT's gaps describe the survival improvements necessary for a population to achieve the abundance and productivity levels associated with viability. Viability criteria were developed by the ICTRT to serve as the biological requirements for long-term recovery, or delisting."). The Court first rejected the argument that NOAA must utilize the same TRT criteria. *Id.* at 9. It found that because NOAA explained the proper use of TRT products, NOAA was entitled to deference in this highly technical area. *Id.* at *9 ("Contrary to plaintiffs' contentions, however,

NMFS considered the TRT planning ranges in its decision on the RMP and explained why they were not applicable . . . ."). The Court also rejected the challenge to the BiOp. *Id.* at *13. Citing the explanation in the Puget Sound BiOp and the Ninth Circuit's language in the present case, that an agency action must cause some "deterioration in the species' *pre-action condition*", the court found that "NMFS appropriately considered the impacts on recovery against the required jeopardy standard." *Id.* at *13 (citing *NMFS v. NWF*, 481 F.3d at 1236) (emphasis in the original).

Plaintiffs' proffered interpretation here is even more extreme than those rejected in the cases above and presents an unworkable standard. If Plaintiffs were correct, every BiOp would need to provide objective criteria and a time frame for achieving recovery before it could be issued. This would require NOAA to prepare a *de facto* recovery plan before issuing any BiOp. This is impossible under the regulatory timeframe. 50 C.F.R. § 402.14(e). Recovery plans take years to develop and require NOAA to assume certain actions will occur. Moreover, it would require NOAA to perform analyses that conflict with the consultation regulations and even ESA § 4(f).[23] In fact, this Court recognized the legal deficiency in such an approach. *NWF v. NMFS*, No. CV 01-640-RE, 2005 WL 1278878, at *17 n.14 (D. Or. May 26, 2005) ("This does not mean that a jeopardy analysis must include the formulation of a specific recovery plan. Recovery planning is governed by section 4 of the ESA, 16 U.S.C. § 1533(f)."), *aff'd*, 524 F.3d 917 (9th Cir. 2008).

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[23] Plaintiffs' urged interpretation creates additional conflicts. First, in contrast to the presumptive statutory time frame of 90 days for consultations under ESA § 7, 16 U.S.C. 1536(b)(1)(A), Congress chose not to impose a specific time limit for preparing recovery plans. 16 U.S.C. § 1533(f). Second, recovery plans identify a broad list of all state, private, and federal actions that should occur in order to recover a species, regardless of whether they are reasonably certain to occur. *See Oregon Natural Res. Council v. Turner*, 863 F. Supp. 1277, 1284 (D. Or. 1994); *Fund for Animals v. Babbitt*, 903 F. Supp. 96, 103 (D.D.C. 1995). Finally, recovery plans are also subject to notice and comment, 16 U.S.C. § 1533(f)(4), something not required in an ESA § 7(a)(2) consultation. *See National Ass'n of Home Builders v. Defenders of Wildlife*, 127 S.Ct. 2518, 2531 n.6 (2007) ("Nor is there any independent right to public comment with regard to consultations conducted under § 7(a)(2)").

Although some salmon and steelhead in this basin have completed recovery plans supported by abundant data, many species do not. In cases where there was no data or an existing recovery plan, NOAA would be required to develop this information before it could meet Plaintiffs' threshold. This not only duplicates recovery planning under ESA § 4(f), but runs contrary of the requirement for NOAA to use "the best scientific and commercial data *available*." 16 U.S.C. § 1536(a)(2) (emphasis added); *Northwest Ecosystem Alliance v. U.S. Fish and Wildlife Serv.*, 475 F.3d 1136, 1147 (9th Cir. 2007) ("best scientific data available" standard does not require the agency to undertake or conduct new studies before taking action, but rather requires only that the agency not ignore existing data that is available); *Kandra v. United States*, 145 F. Supp. 2d 1192, 1208 (D. Or. 2001) ("The Ninth Circuit has interpreted this provision to mean an agency cannot ignore available biological information."); *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d 428, 436 (8th Cir. 2004) (Under ESA § 7(a)(2), "[a]ll that is required of the agencies is to seek out and consider all existing scientific evidence relevant to the decision at hand.") (citation omitted). Congress never contemplated that NOAA would need to generate recovery criteria, much less a recovery plan, before issuing a BiOp. Indeed, the statute requires just the opposite. 16 U.S.C. § 1536(a)(2).

B. NOAA Cannot Return to the 2000 FCRPS BiOp Recovery Analysis Because That Would Require NOAA to Rely On Actions That Are Not Reasonably Certain to Occur.

Plaintiffs also contend that NOAA should return to the same recovery analysis that was used in the 2000 FCRPS BiOp and assert that NOAA failed to explain the reason why it did not use this 2000 recovery framework. NWF Br. at 14-20. As an initial matter, the inquiry before the Court is not whether the 2008 BiOp utilizes the same analysis as the 2000 BiOp, but whether the 2008 BiOp's analysis is consistent with the ESA and this Court's orders and is supported by the record. *Southwest Ctr. for Biological Diversity v. BLM*, 143 F.3d 515, 523 (9th Cir. 1998) (ESA § 7(a)(2) does not require NOAA to adopt the first RPA considered but rather only need adopt an RPA that complies

with the jeopardy standard). In any event, Plaintiffs' claim is simply not true. As NOAA explained, it cannot return to this same recovery analysis used in 2000 as it would run afoul of this Court's instruction to consider only Federal, State, or private actions that are reasonably certain to occur.

Plaintiffs accurately note that in 2000 NOAA analyzed recovery by determining whether there was a "50% likelihood of meeting interim recovery abundance levels in 48 and 100 years". 2000 BiOp at 6-79. However, Plaintiffs neglect to explain how NOAA was able to make this determination. An assessment of future abundance levels at 48 and 100 years was possible only because NOAA made certain assumptions about what would occur in the future (in particular the years beyond the term of the BiOp). *See e.g.*, 2000 BiOp at 1-12 ("In the absence of completed recovery planning, NMFS strives to ascribe the appropriate significance to actions to the extent available information allows. Where information is not available on the recovery needs of the species, either through recovery planning or otherwise, NMFS applies a conservative substitute that is likely to exceed what would be expected of an action if information were available."). NOAA assumed that the future actions contemplated under the interim recovery plans and other various programs would occur. *Id.* Based on this assumption, NOAA was able to make predictions as to the likelihood of certain abundance levels in the future. It could quantify the abundance or growth rate needed to achieve recovery within a certain time frame and assign a probability. This assumption about future Federal and non-Federal actions was the critical piece of information that allowed for the recovery analysis in the 2000 FCRPS BiOp. 2000 BiOp at 1-12.

Plaintiffs' newly found desire to return to this same analysis is nothing less than amazing. These same Plaintiffs urged the Court to strike down the 2000 FCRPS BiOp, not only because NOAA used this 50% likelihood standard, but also because NOAA improperly relied on future actions in its assessment. NWF Br. at 15 n.9 ("NWF challenged this 50% probability metric for allowing much more than an appreciable reduction in a species likelihood of recovery . . . ."). In 2000, NOAA

argued that it needed to consider other future actions to accurately quantify improvements in the out years. *See* May 7, 2003, Opinion and Order at 17 ("The broader range-wide analysis included the expectation of 'a certain amount of improvement to take place, that one way those improvements could take place is through off-site hab[itat] measures . . . .'"). Yet, at Plaintiffs' urging, the Court struck down this approach. *Id.* at 21-25. Even though the assumption of broader range-wide actions was necessary for its recovery analysis, the Court instructed NOAA that it could not rely on future federal actions that were not reasonably certain to occur. *Id.*

Here, NOAA adhered to the Court's instruction. That is why as early as the Lohn Memo, NOAA explained: "basing a prediction of recovery on a time span exceeding the ten year term of the proposed action is not consistent with the Court's reading of the ESA consultation regulations, since at least some of the future Federal actions and non-Federal activities that are likely to be needed for recovery of listed species cannot be reasonably certain to occur or ripe for a §7(a)(2) consultation at this time." NOAA B343 at 3. NOAA further elaborated by explaining, "This [jeopardy and critical habitat] framework is derived from similar framework descriptions that appeared in the 1995 FCRPS Biological Opinion pp. 10-15, and 2000 FCRPS Biological Opinion, Section 1.3. Changes from those earlier descriptions are intended to reflect guidance of intervening court decisions." NOAA C1155 (Resp. Comments) at 3. If NOAA cannot not make assumptions about future recovery actions, it legally cannot determine the time frame for reaching recovery or conversely the rate of growth. That is why recovery planning does not have the same "reasonably certain to occur" standard. 16 U.S.C. § 1533(f). Plaintiffs' urged return to the 2000 analysis places NOAA in conflict with this Court's previous order.

Besides the legal constraints, the task of predicting the future state of conditions for certain populations of fish, much less an ESU, is difficult at best. NOAA needs to have some estimate of the level of actions and the timeframes for implementation, and an assessment of the expected

response as well as the timeframes for the responses. For example, improving tributary flows by lowering irrigation withdrawals can provide almost immediate benefits in terms of survival, but restoring riparian habitat can take years to achieve the desired effect and is usually site specific. This is why the ICTRT products do not specify timeframes for recovery.[24/] While Plaintiffs vigorously contend that NOAA ignored ICTRT products – which is blatantly inaccurate – they also neglect to inform the Court that their new recovery standard asks so much that it actually exceeds even the ICTRT's capabilities because the nature of the inquiry is too speculative. Indeed, even though the ICTRT's job is to evaluate the *attainment* of recovery – not jeopardy – they do not even subscribe to Plaintiffs' standard.

C. **Plaintiffs Fundamentally Misconstrue NOAA's Recovery Analysis.**

Seizing on isolated metrics at the exclusion of the rest of the analysis, Plaintiffs assert that NOAA's recovery prong is reduced to nothing more than the "population is doing better today than it was yesterday." NWF Br. at 9; *see also* OR Br. at 8; NPT Br. at 16. Plaintiffs contend that by failing to attach a specific time frame to recovery, NOAA has neglected to consider the risk of small population size for extended periods of time. OR Br. at 14-15. These characterizations factually misrepresent NOAA's recovery analysis.

NOAA examined a host of considerations, including quantitative metrics at the population level, and determined that for each of the 13 ESUs there was an adequate potential for recovery. For the ESUs that had sufficient data, NOAA concluded that as a result of the RPA and Fish Accords any decline in the ESU would be halted and reversed, thereby ensuring a trend upward. This assessment was much more sophisticated than a simple (>1.0) calculation that Plaintiffs seize upon. Federal

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[24/] Plaintiffs incorrectly assert that the ICTRT has attached 100 year time frames for recovery. The figure of 100 years is not a time frame for achieving recovery; rather it was the time frame that was chosen for modeling purposes, and is a commonly used standard for evaluating whether a population is viable or should be delisted.

Defendants acknowledge that a formulaic answer is preferable, but a BiOp of this magnitude and complexity cannot be developed simply through the use of a calculator. In order to fulfill the mandate to use the best available scientific and commercial data, NOAA must look at all of the factors. 16 U.S.C. § 1536(a)(2).

First, contrary to Plaintiffs' repeated allegations, the RPA and Fish Accords do not merely "make things better than yesterday." NOAA is fully aware, that merely "staying the course," without any consideration of what that means, is insufficient under ESA § 7(a)(2). *ALCOA v. BPA*, 175 F.3d 1156, 1159 (9th Cir. 1999); *Idaho Dep't of Fish and Game v. NMFS*, 850 F. Supp. 886, 899 (D. Or. 1994). And that is not what NOAA did here. Where the data was sufficient, NOAA demonstrated that this collective package of mitigation would halt the decline of an ESU and actually place that ESU on a trajectory upward. *See e.g.*, BiOp at 8.2-28. For example, this collective package of mitigation did not just take an ESU from .5 to .8 (a significant change and certainly "better than yesterday", but still a declining population).[25/] Instead, the RPA and Fish Accords figuratively take an ESU from 0.5 to greater than 1.0, which entails doing far more than what was done yesterday and involves, in some cases, an increase of many more fish.

Second, this package of mitigation actually exceeds the Ninth Circuit's interpretation of the jeopardy standard, which is that the Action Agencies could not "deepen-the jeopardy" or cause "some deterioration in the species' pre-action condition." *NWF v. NMFS*, 524 F.3d at 930. Under the approach employed here, NOAA analyzed whether the proposed action actually improves the baseline condition, *i.e.*, that its prospects for recovery are improved by the proposed action. In addition, NOAA exceeded the requirements of the Ninth Circuit decision by analyzing the entire environmental baseline, which includes the existence of the dams, with the effects of the proposed

[25/] Productivity estimates cannot be made at the ESU level, but rather at the population level; these numbers are used as a point of illustration.

action in one analysis. This exceeds current legal obligations because the Ninth Circuit made very clear that the "existence of the dams" was not the agency action under consultation. *NWF v. NMFS*, 524 F.3d at 930-931 ("we acknowledge that the existence of the dams must be included in the environmental baseline . . . ."). Despite this recognition , the BiOp here exceeds the Ninth Circuit threshold because the RPA and Fish Accords result in a condition better than the pre-action condition, which includes the existence of the dams.

Third, Plaintiffs' arguments misinterpret NOAA's application of quantitative metrics in the recovery prong. After the Ninth Circuit's opinion, NOAA was cognizant that it must roughly know the point at which survival and recovery is at risk. *NWF v. NMFS*, 524 F.3d at 936. To establish this point of risk, and where data was available, NOAA applied the enumerated quantitative metrics. *See* BiOp at 7-20 – 7-26. The point of risk for many of these population level metrics lies at 1.0, meaning anything less than 1.0 indicates that a population is on average declining, but anything greater than 1.0 the population is on average growing. *See e.g., id.* at 7-26 (explaining >1.0 BRT Trend). If the action did not result in something greater than 1.0 for that particular metric, then for that metric – and for that metric alone – NOAA found the point of risk at the population level. *Id.* ("If the log-transformed slope is greater than 1.0, the population abundance is increasing; it is less than 1.0, the abundance is decreasing."). NOAA then evaluated all of these metrics, translated that information to the ESU level, and then, aided by this information, roughly determined the point at which an ESU is at risk, or conversely whether the action had exceeded that threshold.

In contrast, Plaintiffs quote the same Ninth Circuit language to suggest that NOAA must determine the exact time frame for recovery and the specific improvements needed to get there by that certain date, but that is not what the Ninth Circuit said. *NWF v. NMFS*, 524 F.3d at 936. Knowing *roughly* the point at which something is placed *at risk* is a far different question than knowing the specific abundance levels and growth rates needed for full recovery. If NOAA knows

(1) roughly the point of risk and (2) that the ESU will continue to grow into the future, NOAA has a "reasonable assurance" to conclude that the agencies' action will not *reduce* the likelihood of survival and recovery. In fact, because the mitigation here goes much further, it has a "reasonable assurance" that the RPA and Fish Accords actually *increase* the likelihood of survival and recovery for these ESUs. This is not a backward-looking approach; instead it establishes the point of risk and predicts how the ESU's will fare in the future.[26/]

Finally, citing a provision of the ESA Consultation Handbook on population size, Plaintiffs contend that by failing to develop a specific time frame on recovery, NOAA allows the ESU to hover at impermissibly low levels for too long a period of time. NWF Br. at 10. Here again, Plaintiffs misconstrue the analysis. As the Ninth Circuit recognized, the consideration of survival and recovery is a "joint" concept and consideration of one implicates the other. *NWF v. NMFS,* 524 F.3d at 932. Within this joint concept, NOAA analyzed whether the survival of a population would be at risk of extinction over a period of the next 24 years, taking into account the population's current abundance and productivity. BiOp at 7-17. These population-level risks were then considered at the ESU level. NOAA found that there was a low risk of extinction for the next 24 years as a result of the RPA and Fish Accords (survival prong), and that ESU would grow in size (recovery prong). More specifically, NOAA found that there was less than a five percent risk of extinction over the next 24 years, and that because the ESU would grow in size, the action was not "appreciably delaying recovery."[27/] The 24-

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[26/] The Nez Perce Tribe asserts that it "believes *strongly* that this case is the virtual definition of the 'infrequent' situation in which a federal action's recovery impacts will require a finding of jeopardy . . . ." NPT Br. at 12-13 (emphasis in the original). While Federal Defendants respect the Tribe's belief, which is undoubtedly strongly held, it appears this belief, rather than science, drives their litigation position.

[27/] Plaintiffs take issue with NOAA's use of the Quasi-Extinction-Risk ("QET") thresholds. *See e.g.*, NPT Br. at 23-25. Their critiques misunderstand NOAA's survival analysis. As explained in the BiOp, many commenters took issue with using a QET less than 50, while some commenters took

year temporal component is addressed in the survival prong. What Plaintiffs really are arguing is that the recovery prong must have its own independent temporal component. But this ignores NOAA's regulation and the Ninth Circuit's recognition that this is a "joint concept." *NWF v. NMFS*, 524 F.3d at 932.

II. NOAA'S JEOPARDY ANALYSIS PROPERLY UTILIZED THE BEST AVAILABLE DATA.

Plaintiffs also find fault with the next level of detail in the BiOp - the methods and procedures utilized to reach the final determination. Plaintiffs make a number of allegations that NOAA "cherry-picked" data, failed to use the best available data, and did not give the benefit of the doubt to the species. Many of these allegations reveal misunderstandings of NOAA's analyses, while some border on frivolous. While Federal Defendants address these inaccuracies, none of these arguments are properly before the Court as they largely reiterate improper extra-record declarations, as set forth in Federal Defendants' concurrently filed motion to strike. Supplying a party's own witnesses to second-guess the agency's decisions on highly technical matters cuts directly against the appropriate standard of review re-affirmed in *Lands Council*, 537 F.3d at 993, and at a minimum, these portions of Plaintiffs' briefs should be stricken. Should the Court consider these arguments, it will find that NOAA properly analyzed these issues, supported their decision-making, and articulated a reasonable

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issue with using a QET greater than 1 (as was done in the 2000 FCRPS BiOp). BiOP at 7-19. NOAA explained that while it primarily used QET=50 for modeling purposes, it also examined a range of QETs (QET=1, QET=10, QET=30, QET=50) to assess extinction risk in the survival prong. *Id.* at 7-19. It found that this range was more accurate for certain populations because they had demonstrated the ability to drop below 50 fish and yet still maintain next year's population. *Id.* It also explained that a QET=50 was more commonly used by the TRT's to assess long-term viability considerations, whereas NOAA's survival inquiry focuses on extinction risk for the next 24 years. *Id.* Finally, this is consistent with the ISAB's instruction: "The probabilities of quasi-extinction should not be considered equivalent to the probability of biological extinction. Rather, the former should be interpreted as the probability of entering a state where the risk of extinction cannot be modeled but is considered to be unacceptably high." BiOp at 7-16.

connection between the data and the final decision.

A. NOAA Properly Quantified The Metrics Utilized in the Jeopardy Analysis.

As explained above, NOAA properly utilized the best available data on recovery from the ICTRT, but this recovery-planning data is not wholly applicable to an ESA § 7 consultation - thus NOAA calculated the metrics discussed above. Plaintiffs' attack on these metrics begins with the unremarkable point that there are potential margins of error for the metrics estimates, which they argue renders the metrics "meaningless." NWF Br. at 32. If the only reliable statistics are those free of uncertainty, Plaintiffs' overbroad argument would invalidate a large swath of research in many fields, as statistical uncertainty is inherent in almost all quantitative estimates and always will be present. Here, in accordance with standard statistical methods, NOAA properly calculated and explained the statistical uncertainties by using confidence intervals, which are a gauge of the reliability of an estimate. *See* CA at A-6 - A-11; BiOp at 7-22 - 7-26. With the recognition that wide confidence intervals limit the utility of quantitative metrics, NOAA correctly accounted for the statistical uncertainty by considering a variety of qualitative factors, as discussed below. BiOp at 7-20.

NWF and Oregon also accuse NOAA of cherry-picking the start and end dates for data sets of various populations in order to calculate more favorable metric results.[28/] NWF Br. at 33; OR Br.

[28/] Plaintiffs also critique the calculation of the BRT trend metric, alleging that NMFS improperly excluded zero-spawing years. NWF Br. at 33. Since it is impossible to take a logarithm of zero, one was added before transforming the data. BiOp at 7-25. As explained by NOAA, the SPAZ model used to perform these analyses was supposed to make this conversion. BiOp at 7-26. Upon further review, it appears this did not occur. *See* Declaration of Chris Toole at ¶ 43. NMFS has re-run the analysis for the Marsh and Sulphur Creek population and determined that the error has no appreciable effect on the results of the jeopardy analysis. *Id.* at ¶¶ 43-44. This is because the base period estimate for both the Sulphur Creek and Marsh Creek populations declined by 0.012 and 0.013, respectively. *Id.* After the current-to-prospective results are applied to these new base period estimates, the BRT trend metric is still well above 1.0 for both populations, and the R/S and lambda metrics remain unchanged, ranging from 1.15 to 1.35 for these populations. *Id. See National Ass'n*

at 16-19. Despite the effort expended to support this accusation, they overlook the simple explanation that the Action Agencies and NOAA utilized the time periods and data sets used by the ICTRT in the recovery planning process (~1980-1999 brood years). BiOp at 7-11; NOAA B78 - B82; NOAA B193. The ICTRT data sets represent a long-enough period to encompass climate and biological variability, but are sufficiently recent enough to include many recent management actions affecting the listed species. BiOp at 7-11. Furthermore, using the same time period as the ICTRT facilitates comparisons with recovery planning analyses. NOAA C1155 at 5. It is curious that the Plaintiffs urge adoption of the ICTRT's products where it is favorable to their position, but are suspicious of ICTRT data when it works against their position. In any event, NOAA clearly explained the reasons for its choice of time period, and Oregon's myriad "what-if" manipulations of the data do not undermine those valid reasons.

B. The Jeopardy Analysis is Correct, Both in Calculations and Treatment of Uncertainties.

Plaintiffs next allege that the jeopardy analysis suffers from both discrete computational errors as well as improper treatment of uncertainties, leading NOAA to a more optimistic result than is reasonable. NWF Br. at 34-38. The first assertion is that NOAA underestimated the negative hydrosystem effects on SR steelhead, based on Mr. Olney's assumption that NOAA incorrectly calculated the "Base" period survival estimate. NWF Br. at 34-35. The analysis for SR steelhead varied from other ESUs because NOAA did not have confidence that the "Current" estimates of post-Bonneville survival rates could serve as viable surrogates for the 20-year "Base" period. *See* Graves Decl. at ¶¶ 34-35. This was largely because, compared to the other species modeled in COMPASS, SR steelhead display larger survival differentials between transported and inriver migrants and are highly sensitive to relatively small changes in timing to below Bonneville dam. *Id.*

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of Homebuilders, 127 S.Ct. at 2530 (agency action not to be overturned where error is harmless).

NOAA discussed this issue, as reflected in the administrative record, and appropriately accounted for the sensitivity in data and modeling runs. *Id.* While the inadvertent exclusion of this information from the SCA caused unnecessary confusion, it is not an error and the quantitative analysis for SR steelhead is accurate. *Id.* at ¶ 37. Likewise, Plaintiffs' critiques of the avian predation adjustment are also incorrect. Mr. Olney errs in asserting that NOAA simply failed to apply a 50% reduction in the estimated predation control benefit in order to account for compensatory mortality. NMFS initially did consider applying a hypothetical compensatory mortality. BiOp at 7-48. However, when that adjustment actually was evaluated, it was determined that it significantly did not affect the estimated benefits of the tern control efforts, so the theoretical adjustment was not applied.[29/] *See e.g.*, BiOp at 8.3-26; Graves Decl. at ¶ 45.

In addition to alleged computational errors, NWF and the Nez Perce charge that NOAA improperly evaluated the effects of climate change. NWF Br. at 37; NPT Br. at 25-27. Climate change comprehensively was addressed in a variety of ways: (1) an environmental baseline that summarizes the likely effects of project climate changes on hydrology, temperatures, and salmon in the Columbia Basin, incorporating the ISAB's most recent work, SCA 5-59 - 5-67; (2) in conservative assumptions for ocean and weather conditions utilized in the quantitative analyses, BiOp at 7-12 - 7-14; (3) a qualitative framework to assess how the RPA implements the ISAB recommendations to address the impacts of climate change on Columbia Basin salmon, BiOp at 7-32

[29/] Plaintiffs also incorrectly allege that the avian predation benefits are overestimated due to a failure to account for predation from double-crested cormorants. Mortality from double-crested cormorant predation is captured fully in Current metric estimates and the Current-Prospective analysis. Graves Decl. at ¶ 46. Mr. Olney is also incorrect in stating that there are no plans to address cormorant predation, as the RPA requires a cormorant management plan. RPA Action 46. However, NOAA conservatively did not assign any benefit to this effort in the Current-to-Prospective adjustment, so that the Current cormorant mortality is carried through in the Current-to-Prospective step and accounted for in the analysis. Graves Decl. at ¶ 46.

to 7-34, which is employed in the Effects Analysis, BiOp at 8-17 - 8-23; and (4) adaptive management provisions requiring the incorporation of new climate change data, RPA Actions 1-3, 35, 37, and research into refinement of climate change modeling techniques, RPA Action 7.

Plaintiffs focus on the ocean assumptions used in the quantitative analyses, alleging that data is not conservative enough. NWF Br. at 37. Plaintiffs fail to note that NOAA modeled all three of the climate scenarios utilized by the ICTRT. BiOp at 7-13. Despite the fact that the ICTRT was modeling over 100 years instead of the ten-year period of the BiOp, Plaintiffs argue that NOAA still should have used the ICTRT's more pessimistic model, based on the ISAB's comment that future conditions may be even worse. However, when NOAA asked the ISAB to identify specific models which accurately would reflect even more pessimistic ocean conditions, the response was that there were no regional models that could predict ocean conditions in the next five-ten years. BiOp at 7-13. Nor do Plaintiffs suggest such a model. Accordingly, NOAA reasonably utilized the 1980-2001 "recent" ocean climate scenario. *Lands Council*, 537 F.3d at 991-93 (agency choice of scientific methodology in its field of expertise is entitled to substantial deference unless based on a "clear error of judgment"); *National Wildlife Fed'n v. EPA*, 286 F.3d 554, 565 (D.C. Cir. 2002) ("We may reject an agency's choice of a scientific model 'only when the model bears no rational relationship to the characteristics of the data to which it is applied.'"). Plaintiffs' other critique is that NOAA failed to account for the impacts of climate change on salmonid freshwater life-history stages. NWF Br. at 37. This ignores the extensive effort to incorporate the ISAB's climate change report, which is the best available data on mitigating climate change impacts on salmonids.[30/] Since all of these

[30/] Plaintiffs' charge that NOAA ignored specific studies about the impacts of climate change in the Columbia River Basin is unfounded. As recognized by Plaintiffs' declarant, the 2007 ISAB report upon which NOAA relied incorporates and summarizes the relevant scientific studies of climate change and salmonids in the region, Glick Decl. ¶ 5, and indeed, many of the studies relied upon by Ms. Glick. Toole Decl. at ¶ 46.

recommendations address the impacts of climate change upon freshwater life-history stages, Plaintiffs' attack is misdirected.

Plaintiffs also critique the benefits analysis of the kelt reconditioning program as overly optimistic. NWF Br. at 37. As with many of the RPA Actions, the value of the kelt reconditioning program is the Action Agencies' commitment to achieve the particular improvement - the benefits analysis is primarily a tool for assuring there is a realistic potential for achieving this survival goal, and as shown in the BiOp, the analysis shows that the six percent improvement is a realistic result. First, the shift in the two week period of no voluntary spill does not change the likely survival of B-run steelhead kelts, and Mr. Olney's critique also ignores the fact that a substantial number of female kelts will need to be reconditioned and will not be left to migrate in-river. Graves Decl. at ¶ 40. Second, Mr. Olney maintains that NOAA should have applied a 20% reduction in benefit on the assumption that not all kelts collected would be suitable for reconditioning, but fails to note the program could require actions to increase the number of female kelts suitable for reconditioning, such as collecting them from alternate locations.[31/] *Id.* at ¶ 41. Third, Mr. Olney's concerns about the uncertainty surrounding actual success of reconditioned kelt spawning in the wild was considered by NMFS and is reflected in cutting the assumed success rate to 50%. *Id.* at ¶ 44. Finally, while there is scientific uncertainty that needs to be addressed in development of the kelt program, NOAA acknowledged these concerns, and Mr. Olney suggests nothing to demonstrate that they cannot be resolved during the development and implementation of the program.

Lastly, Plaintiffs critique the quantitative base-to-current multiplier used for particular populations of Upper Columbia River ("UCR") Steelhead and SR spring/summer Chinook which have benefitted from significant hatchery reforms such as curtailment of straying or improvements

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[31/] Even if a 20% reduction was applied, the 6% increase attributed to the program is still within the range of estimated increases, which would top out at 7.12%. *See* SCA Appendix F at 4-5.

in broodstock management protocols. Such reforms have reduced the negative impact of hatchery fish and resulted in an increased recruit-to-spawner productivity for the population as a whole. CA at 5-17; SCA Appendix I at 16. Plaintiffs raise several concerns with this methodology. First, they argue that this method removes the alleged decline of long-term productivity of wild fish from consideration even though impacts to the productivity of these fish affect recovery. NWF Br. at 37. However, the BiOp recognizes the limitations of the method and the current data, and furthermore provides a detailed analysis of how hatchery fish can affect the productivity of wild fish. SCA at Appendix C, D, and I; Declaration of Rob Jones ("Jones Decl.") at ¶¶ 35-38. Second, Plaintiffs critique the estimate of the fraction of natural-origin spawners for specific populations, based on data concerning different populations. NWF Br. at 37. This speculation about other populations does not undermine NOAA's best estimates, which are based on the operations of each relevant hatchery. NOAA S35, S36; Jones Decl. at ¶¶ 23-24, 40. Finally, Plaintiffs incorrectly allege that NOAA selectively applied this methodology. As explained, only nine specific populations met the criteria for significant, measurable changes in productivity not already captured in the baseline. *Id.* at ¶¶ 21, 41. Accordingly, NOAA correctly calculated and reasonably included a Base-Current survival multiplier for these nine populations.

C. The Jeopardy Conclusions Are Supported By Rational Explanations.

Plaintiffs' final critique is that the discussion of qualitative factors is not clearly linked to the jeopardy conclusions for each ESU, alleging that the same boilerplate language is used for almost every ESU. NWF Br. at 38-39. Even to support such an argument, Plaintiffs must focus only on two discrete paragraphs (summarizing three years' worth of work) and completely ignore the detailed discussion of how qualitative factors affect each major population group, in addition to the qualitative factors considered for each MPG to balance the statistical uncertainty in the quantitative estimates. *See e.g.*, BiOp at 8.3-27 - 8.3-39. Plaintiffs also ignore the ESU-level discussion of the relative

qualitative factors. BiOp at 8.3-39 - 8.3-40. Only by disregarding these specific discussions of how qualitative factors were applied at every level in the analysis can Plaintiffs even support their allegations.

Plaintiffs' critique of the use of qualitative factors admits that this method is "certainly an acceptable part of good scientific practice," but merely complains NOAA did not provide a clear enough "recipe" to duplicate. NWF Br. at 33, n. 26, 38 (*citing* Orzack Decl., ¶¶ 19-20). Again, Plaintiffs' desire for a strict formulaic answer ignores the realities of this consultation. NOAA clearly enumerated each qualitative factor to be considered and how that factor would be considered. BiOp at 7-34 - 7-37. However, the wide variation in populations and data makes a rigid formulaic approach across all ESUs unworkable. In lieu of an unreasonable rigid approach, NOAA evaluated a consistent set of qualitative factors for each ESU and thoroughly explained its analysis in evaluating both the quantitative and the qualitative information before reaching its conclusion concerning jeopardy. *See e.g.*, BiOp at 8.3-39 - 8.3-45. As discussed above, this was detailed at every stage in the roll-up analysis from each MPG to the ESU-wide level. The BiOp's analysis of how qualitative factors contribute to the jeopardy conclusions is more than adequate for any careful reader to follow. Since the use of this qualitative data satisfies the ESA's requirement to consider all the best available data, and the process for considering such data was fully explained, in accordance with the APA, this Court should disregard Plaintiffs' challenge to NOAA's use of qualitative data in the jeopardy analysis.[32/]

[32/] *Amicus* Nez Perce's focus on dam breaching strangely is disconnected from any existing parties' claim against the BiOp. Indeed, the question before this Court is whether the BiOp, evaluating the current RPA, correctly concluded that jeopardy and adverse modification would be avoided. The RPA under evaluation employed the aggressive non-breach approach, and since NOAA determined that this approach satisfies ESA§ 7, there was no need for any contingency concerning dam breaching. NOAA C1155 at 39-42; NOAA S77 at 37-41. Furthermore, dam breaching does not fit within the regulatory definition of RPA. Issue Summaries at 37. In reaching this conclusion, the

III. NOAA RELIED ONLY UPON FUTURE FEDERAL, STATE, OR PRIVATE ACTIONS THAT ARE REASONABLY CERTAIN TO OCCUR.

A. NOAA Did Not Assume Any Improper Benefits Associated With Hatcheries.

In an argument that neither Oregon nor the Nez Perce Tribe join, NWF asserts that NOAA impermissibly assumed benefits for hatchery reforms that have not undergone completed ESA § 7(a)(2) consultation. NWF Br. at 20-21. NWF misunderstands the analysis.

This Court instructed Federal Defendants to use an "all H approach." This, of course, included an evaluation of hatcheries and what could be done to improve their use, while at the same time preserving the United States' ability to meet its treaty obligations with the Tribes. From the hatchery workgroup in the collaboration, the sovereigns realized that certain changes could be made within existing hatchery practices, but that these changes would take time and needed to be intimately coordinated with *United States v. Oregon*. *See* CA 3-16 – 3-17. In order to effectuate these changes, the Action Agencies proposed a number of actions as well as a programmatic change in funding these hatcheries. *See* BA at 2-42 – 2-46; *see also id.* at B.2.3-1 (Appendix B), ("To include, as part of the ESA Section 7 Consultation with [NMFS] . . . programmatic consideration of the Federal Action Agencies' funding of all FCRPS hatchery programs required as mitigation for the operation of FCRPS . . . ."); *see also* BA at B.2.3-13 – 3-14. This programmatic change calls for adoption of new criteria for funding decisions on mitigation programs that would incorporate best management

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Nez Perce argue that NOAA considered improper factors. NPT Br. at 39-40. However, the Ninth Circuit long has recognized that the Secretary has broad discretion when choosing reasonable and prudent alternatives, and that discretion properly extends to consideration of other factors. *Southwest Ctr. for Biological Diversity v. U.S. Bureau of Reclamation*, 143 F.3d 515, 523 n.5 (9th Cir. 1998). When faced with a range of possible measures that are consistent with the regulatory definition of an RPA, 50 C.F.R.§ 402.02, "NMFS can pick amongst them based on other factors, including effects on the [regulated] industry." *Greenpeace v. NMFS*, 55 F. Supp. 2d 1248, 1268 (W.D. Wash. 1999). While NOAA did not need to consider dam breaching as part of the RPA here because of the success of the four-H approach, it is certainly not improper to consider other authorized purposes on the river. *Southwest Ctr.*, 143 F.3d at 523.

practices ("BMPs"). *Id.* at B.2.3-2. These BMPs are a set of guidelines that are tailored to each FCRPS mitigation hatchery and largely track the Hatchery Scientific Review Group ("HSRGs") recommendations in its 2004 report. *Id.* at B.2.3-13.

As a result, new funding for these hatcheries now is conditioned on complying with these guidelines, which will result in changes that are beneficial for many of these ESUs. BiOp at RPA Table p. 53 (RPA 39); *see also* BA at B.2.3-12 – 3-13 (listing the funding criteria). Like the other RPAs for hatcheries, because this was an agency action, it was consulted on in the BiOp. BiOp at 8-35. However, because this proposal is at the programmatic level, that is, it does not call for any immediate changes in on-going operation and maintenance of existing hatcheries but instead conditions future funding on compliance with BMPs, NOAA performed only a programmatic consultation rather than a site-specific consultation. *Id.*

In contrast, NOAA recognized that site-specific changes in hatcheries and any changes derived from the actual implementation of BMPs, would need to undergo their own consultation. That is why RPA 39 requires new Hatchery and Genetic Management Plans ("HGMP") and specifies a schedule for completing these site-specific consultation. BiOp at RPA 39. NOAA was very careful not to assume any benefits from these future site-specific consultations. BiOp at 8-35 ("These benefits, however, are not relied upon for this consultation and are pending completion of the future hatchery consultations."). But this does not mean NOAA could ignore the Actions Agencies' programmatic proposal to restructure and condition future hatchery funding. *Id.* at 8-35 ("Subject to these future hatchery consultations, implementation of BMP's in NOAA Fisheries approved HGMPs are expected to: (1) integrate hatchery mitigation and conservation objectives; (2) preserve genetic resources; and (3) accelerate trends toward recovery as limiting factors and threats are fixed an natural productivity increases.").

NWF confuses this distinction. While NOAA did not assume any benefits (quantitatively or

qualitatively) at the site-specific level for future reform, it was required to analyze the effect of the Action Agencies' request for a programmatic consultation. NOAA recognized that this change in the funding structure would have an effect – albeit beneficial. BiOP at 8-37. The programmatic change in funding was part of this ESA § 7(a)(2) consultation – it was part of the Action Agencies' Proposed RPA and NOAA's RPA. BA at B.2.3-1. Thus, NOAA analyzed the effect of this programmatic aspect of the RPA in a qualitative fashion. BiOp at 8-37 ("except where specifically indicated (such as the consideration of 'safety net' hatchery programs to assure survival), the conclusion in this opinion regarding jeopardy and the potential effect of these hatchery improvements can rely only qualitatively on the FCRPS RPA requiring hatchery reform and improvement."). There is nothing wrong with, nor any prohibition on conducting a programmatic consultation. *Pacific Rivers Council v. Thomas*, 30 F.3d 1050, 1051-52 (9th Cir. 1994) (requiring agencies to consult on programmatic documents). Furthermore, the consultation regulations do not prohibit NOAA from considering the indirect or direct effects from this action as long as that action is reasonably certain to occur. Indeed, it must. 50 C.F.R. § 402.02.[33/] NWF appears to be so intent on finding fault with this BiOp, that they neglect to realize that this new funding structure (a significant beneficial change in how hatcheries will be run in the future) was actually part of this consultation. Because it was part of the consultation, consideration of the effects is entirely appropriate. *Id.*

B. <u>The Benefits From Habitat Actions Are Reasonably Certain To Occur</u>.

NWF and Oregon contend that the proposed habitat actions are not reasonably certain to

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[33/] NWF seems to suggest that NOAA can consider only the direct and indirect effects from agency actions that have undergone a completed ESA § 7(a)(2) consultation. NWF Br. at 20-21. This is not what the regulation requires. The regulation, 50 C.F.R. § 402.02, requires only a completed consultation for those actions that are included *in the environmental baseline*. *Id.* In contrast, the Ninth Circuit has required only that *effects from agency action* be "reasonably certain to occur." *NWF v. NMFS*, 524 F.3d at 936 n. 17. Here, the programmatic effects are reasonably certain to occur and therefore were included in the analysis.

occur. NWF Br. at 22; OR Br. at 26. The Nez Perce Tribe similarly takes issue with the habitat component of the FCRPS BiOp, but while approving of the methodology, asserts that the projected benefits are not reasonably certain to occur unless their specific projects are funded. NPT Br. at 28. Remarkably, Oregon and the Nez Perce Tribe completely ignore the Fish Accords, and NWF relegates its discussion to a mere footnote.[34/] NWF Br. at 24 n.18. Federal Defendants are at a complete loss as to how these parties credibly can contend that these habitat actions are not reasonably certain to occur while at the same time providing no meaningful explanation as to the effects of the Fish Accords. The Fish Accords commit the Action Agencies to the expenditure of nearly $1 billion over ten years, much of which is directed at habitat improvements. *See* Fish Accords at 4. To the extent there was any doubt as to the effectiveness of the RPA – to which NOAA has none – these legal obligations ensure that these habitat actions are more than reasonably certain to occur.[35/]

1. Tributary Habitat Actions Are Reasonably Certain to Occur.

As hydro-system improvements are reaching a point of diminishing returns, tributary habitat

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[34/] Just recently, Oregon submitted a letter to the Court acknowledging the existence of the Fish Accords. (Doc. 1532). This letter effectively concedes that the Accords create certainty that the habitat projects will occur, but it appears Oregon is concerned that their specific projects will not be funded. *Id.* As explained below, under the BiOp's RPA the Action Agencies are required to attain habitat improvements. If Oregon's projects will aid the Action Agencies in attaining these improvements, they will of course be considered, regardless of whether Oregon supports the region's efforts or not.

[35/] Plaintiffs place great reliance on *Center for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1153 (D. Ariz. 2002). In that case, the Army's compliance with ESA § 7(a)(2) was premised solely on the fact that they entered into an MOA that required them to plan and consider – not implement– mitigation measures. *Id.* ("There are no requirements in the Final BO to reduce reliance on groundwater pumping by any particular amount or to achieve any measurable goals with respect to water recharge . . . There is no date certain implementation requirement. The MOA includes a laundry list of possible mitigation measures . . . but it does not establish which projects have to be undertaken, when, nor what the conservation objectives are for the respective projects."). As explained above, it strains credulity to suggest we have a similar circumstance here.

improvement resulting in increased fish survival becomes an increasingly important component of salmon recovery. For tributary habitat improvement in 2007 to 2009, NOAA required specific habitat actions to be completed by the Action Agencies to achieve population-specific survival improvements. BiOp at RPA Table p. 40 (RPA 34) ("The Action Agencies will provide funding and technical assistance necessary to implement the specific projects identified for implementation in 2007 to 2009 (FCRPS BA, Attachment B.2.2-2, Tables 1-5a) as part of a tributary habitat program to achieve the population-specific overall habitat quality improvement identified in Table 5."); *see also* BA, Attachment B.2.2.2 (tributary habitat action tables). For 2010 to 2018, NOAA also required the Action Agencies to commit themselves to specific habitat quality improvements, but did not require the Action Agencies to specify particular projects at this time. *Id.* at RPA Table p. 41 (RPA 35) ("During 2010 to 2018, the Action Agencies will provide funding and/or technical assistance to implement specific habitat projects to achieve the specified habitat quality improvements in Table 5.").

To assess the benefits from habitat projects, NOAA used the habitat methodology developed in the Collaboration Habitat Workgroup for priority areas.[36/] This approach capitalizes on local expertise and knowledge of particular populations. BiOp at 7-44 ("Local biologists considered the primary limiting factors identified in recovery planning as well as the tributary habitat actions needed to address those limiting factors."). Even though NOAA and the local biologists spent a great deal of time defining the limiting factors and mitigation in accordance with this methodology, the specific parameters for projects in 2010 to 2018 have not been identified. *Id.* at 7-45. Instead, NOAA required the Action Agencies to attain specific and definite habitat improvements addressing these identified limiting factors for various populations in the ESUs. *See id.* at RPA Table at 44-45 (Table

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[36/] For non-priority areas, NOAA used an updated version of the habitat methodology that was used in prior consultation commonly referred to as the Appendix E Methodology. BiOp at 7-48.

5) (listing the habitat percentage of habitat improvement required of the Action Agencies); *see also* FCRPS BA, Appendix B, B.2.2-8 – 2-10 (explaining the process by which future tributary habitat actions will be chosen).

Plaintiffs' criticisms fail to appreciate that (1) the limiting factors have been identified by the collaborators for each population, *see* CA at C-1-9, and (2) it would be unwise to lock-in the parameters for specific habitat projects beyond a three-year planning and implementation horizon. *See* ESU matrices (*e.g.,* NOAA C352 at 27-80). Habitat conditions, population characteristics, land-owner permission, and even limiting factors easily can change within a matter of a few years.[37/] BA at B.2.2-9. Indeed, the one thing that is known today is that habitat conditions will change from what they are now. It is highly likely that as these conditions continue to change, and as scientific knowledge and experience grow, benefits obtained from an array of different habitat projects to be specified later in the future could be greater than those projects being contemplated today. *Id.* ("The amount of habitat quality change associated with different projects will be a criterion in [future] project selection."); *see also id.* ("All VSP parameters will be considered when selecting projects to treat limiting factors . . . ."). That is why NOAA created a process by which an expert panel will decide future habitat quality improvements and monitor the changes in habitat-limiting factors

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[37/] For example, the Nez Perce Tribe recently proposed a habitat project funded by BPA commonly referred to as the "Glory Hole" project. At the last minute, the landowner informed the parties it would not allow access on its property and thus the project could not move forward. *See* S.2.1 – 623 (Email from Emmit E. Taylor, Jr. (NPT) to Vince Kozakiewicz (NMFS) dated 4/8/2008 at 3:55:57 pm). The Nez Perce Tribe proposed an alternate project and after consulting with NOAA, BPA agreed to provide alternate funding and another project was implemented. *Id.* This illustrates the critical need for habitat projects to be flexible. Understandably, the Nez Perce Tribe desires that their specific projects be funded, but as the Tribe's experience with the Glory Hole project demonstrates, locking in future projects does not allow for the flexibility required to address unforseen obstacles. It may be that many of the projects listed in the Nez Perce's declaration ultimately will be implemented in achieving the survival improvements, but merely providing a list of projects does not make them more certain to occur.

resulting from previous actions. BiOp at RPA Table p. 41 (RPA 35) ("Habitat quality improvements associated with projects will be estimated in advance of project selection by expert panels . . . [and these panels will] estimate changes in habitat limiting factors from the implementation of Action Agency habitat actions."). The expert panels, composed of Federal, State, and Tribal staff, will ensure that the habitat projects and associated improvements will be identified in accordance with the best available science. BiOp at RPA Table p. 42 ("The Action Agencies will use the expert panels to provide input on changes in habitat quality and function as a result of limiting factors improvements . . . .").

The Action Agencies are required by the RPA to achieve certain habitat improvements, and as the language in the RPA makes clear, this must be done by date certain. BiOp at RPA Table p. 44-45 (RPA 35). The Action Agencies have a lengthy history of providing funding for these actions and will continue to do so.[38/] The commitment, and more importantly the money, is there. If there was any doubt, the Fish Accords provide an additional layer of financial commitment to actions and the attendant improvements, as well as State and Tribal oversight. Corps 00403 at 007802-03. It is true that Federal Defendants cannot point to a specific project that will occur in 2018, but it is equally true that the Federal agencies have provided commitments, money, and binding legal agreements to

[38/] *See* BA at B.2.2-3 – 2-4 ("Between 2000 and 2005, the Action Agencies spent over $100 million to protect and restore more than 1,000 miles of riparian habitat, screen 85 diversions, restore passage to 1,280 miles of stream, and acquire 530 cubic feet per second of water for instream flow . . . ."); *see also id.* ("The BPA funding commitments increased from approximately $20 million per year (average between 2000 and 2006) to approximately $31.5 million per year for tributary habitat actions to benefit anadromous fish during 2007-2009, about a 58 percent increase over the 2000 and 2004 BiOp program . . ."); *id.* at B.2.2-8 ("BPA will increase its funding commitment to $45 million per year for 2010-2017 for its habitat program to achieve the remaining portion of the habitat improvement.")

ensure that habitat improvement will occur.[39] Corps 00403 at 007792-93. This is more than sufficient. *See Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944, 955-56 (9th Cir. 2003) (upholding no jeopardy determination predicated in large part on future mitigation measures called for in a binding Conservation Agreement); *Southwest Ctr. For Biological Diversity*, 143 F.3d 515, 523-24 (9th Cir. 1998) (upholding BiOp RPA predicated on future commitments to acquire mitigation parcels even though the parcels were not presently known).

2. Estuary Benefits Are Reasonably Certain to Occur.

The RPA has three actions specifically designed to improve juvenile and adult fish survival in the estuary, divided into habitat projects in 2007-2009, similar projects in 2010-2018, and the development and implementation of a pile dike removal program. RPA Actions 36-38. Together, the actions make up a ten-year estuary habitat program which will achieve increased survival benefits

[39] NWF only briefly mentions the Fish Accords, in keeping with its efforts to downplay these extraordinary and historic agreements between the Action Agencies, Tribes, and States setting forth ten-year commitments to projects. NWF acknowledges that the Accords specify hundreds of projects (citing to just a portion of the project list accompanying one of the Accords, at AR Doc. B.45 at Attach B), but suggests these are unreliable because funding "must still be approved by the Northwest Power and Conservation Council." NWF at 24, n. 18. To the contrary, the Council is not required to approve BPA's funding. BPA (as the primary funder of habitat work in the Accords) acts consistently with the Council's Fish and Wildlife Program under the Northwest Power Act, 16 U.S.C. § 839b(h)(10)(A), but BPA has the final authority to make its own funding decisions. *Northwest Res. Info. Ctr. v. NMFS*, 25 F.3d 872, 874 (9th Cir. 1994)(citing *Seattle Master Builders Ass'n v. Pacific NW Elec. Power & Conservation Planning*, 786 F.2d 1359, 1362 (9th Cir. 1986); *Northwest Envtl. Def. Ctr. v. Bonneville Power Admin.*, 117 F.3d 1520, 1532 (9th Cir. 1997). While BPA's funding is not subject to the Council's approval, BPA will continue to coordinate implementation of its project commitments in the Fish Accords with the Council, and to weigh the recommendations of the Council and the Independent Science Review Panel ("ISRP") to ensure the projects remain consistent with the Council's Program. *See e.g.* NOAA B45 at 15-16. NWF also implies that because there is a "replacement project" mechanism identified in the Fish Accords, the projects are less certain. To the contrary, the "replacement project" mechanism is a prudent response to the real-world conditions that can affect project implementation, particularly over a ten-year horizon.

of 9.0% and almost 6.0% for ocean-type and stream-type fish, respectively.[40/] RPA Action 36. This program more than doubles the Action Agencies' efforts on estuary habitat actions. BA at B.2.2-12. Like other actions, this program will be fine-tuned through adaptive management, based on the results of the four research and monitoring actions concerning the estuary. BA at B.2.6-1-16 - B.2.6-1-17; RPA Actions 58-61.

To estimate the survival benefits from habitat projects, the estuary benefits analysis was developed through the collaboration process, *see e.g.*, NOAA C509 at 3, 13, 76-97; CA at D-1-3. In Step One, projects were rated using the Lower Columbia River Estuary Partnership's ("LCREP")[41/] criteria for identifying and prioritizing estuary habitat projects, examining the certainty of success and the potential benefits for improvement. S*ee* BA at B.2.2-3. The second step linked the projects to five specific recovery actions identified in the Estuary Recovery Plan Module ("Module") and estimated the contribution of each project to those recovery actions.[42/] CA at D-1-4; *id.* at Table 2. Within Step Two, survival benefits for each project were based on the results of Step One and the scale of the project in context of the goals for each recovery action identified in the Module. CA at D-1-5; *id.* at D-1-6 (explanation of example). These project benefits were then tallied to determine the overall contribution toward the 20% survival target, then converted to total increase in juvenile

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[40/] Due to their longer use of the estuary, most projects will provide a greater benefit for ocean-type ESUs, but since all ESUs utilize the estuary, the actions will improve survival for all 13 ESUs. BA at B.2.2-14.

[41/] The LCREP is a public-private initiative in the National Estuary Program. BA at B.2.2-13. The Partnership integrates the states of Oregon and Washington, 9 counties, and 28 cities in a regional framework for acquisition and restoration efforts in the estuary. *Id.*

[42/] The Module targets a 20% survival increase, which is deemed to be a plausible result from implementation of all the identified estuary actions. CA at D-1-4; NOAA B347 at 5-33. This 20% target is allocated among 23 different management actions in order to characterize the presumed survival benefit for each action. NOAA B347 at 5-33; *id.* at Table 5-5.

salmon exiting the estuary as a result of implementing the projects, resulting in the total of 9% for ocean-type and almost 6% for stream-type.[43] CA at D-1-6; *id.* at Table 6.

As with tributary habitat projects, NWF and Oregon assert that the BiOp improperly relies upon these benefits, since not all projects currently are identified or funded. What Plaintiffs fail to understand is that the Action Agencies committed to implement additional projects *as needed* to achieve the total estuary survival benefits. Whether every project currently is identified has no bearing on whether the estuary improvement program, as a whole, will achieve the survival benefits at the end of ten years. Nor is the process to identify future projects "vague." The Action Agencies will work with the LCREP's Science workgroup to identify projects, using recovery planning and the LCREP project selection criteria.[44] *See* RPA 37. The Action Agencies also will convene an expert regional technical group to determine survival benefits of new projects using the habitat metrics and new data developed through the Research, Monitoring, and Evaluation ("RM&E")

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[43] The allegations that these benefits exceed the maximum benefits possible are due to a misunderstanding of the analysis. The figures recited by Oregon, based on Bowles Decl. ¶ 165, are simply incorrect according to the method described by Mr. Bowles, and thus will not be addressed further. Mr. Olney's figures of 5.6% and 2.8% are based upon the incorrect assumption that the benefits achieved from 2010-2018 will be limited in value and in type by the project identified in the 2007-2009 period and the exclusion of benefits assigned to the unidentified projects to be funded in that period. Olney Decl., ¶ 72. For the period 2010-2018, the Action Agencies will have the full suite of subactions available with which to achieve the benefits designated for those periods, including implementation of CRE 8.2, which are increased from the 2007-2009 period. *See* CA D-1 at Table 5. Mr. Olney also argues that benefits estimates are incorrect because the results exceed the maximum benefit possible from full implementation of the five recovery actions in the Module, which are 8.6% and 4.9 %. Olney Decl., ¶ 73. Because these five categories of actions are more recognized restoration actions, it is not unusual that the Action Agencies would rely more heavily upon these actions than envisioned in the Module. Any disconnect between the figures in the Module and the BiOp's benefits estimate is a result of the Action Agencies' commitment to achieve even more benefit from these categories of actions than originally envisioned in the Module. It is difficult to understand the critique here, unless NWF faults the Action Agencies for planning to achieve more benefit than originally envisioned in the recovery planning process.

[44] This same process is used for replacement projects if previously identified projects cannot go forward. RPA 37.

estuary actions. *Id.*

NWF and Oregon complain that the assignment of benefits to federal projects is qualitative and not documented to their satisfaction, ignoring the fact that the state of the science concerning the estuary "is such that quantitative answer to questions about estuarine ecology are not necessarily available at this time." NOAA B347 at ES-1. While NWF highlights the Science Center's critique of this methodology, NWF Br. at 26, it fails to note NOAA's response. NOAA pointed out that the Science Center's review analyzed a different subset of projects than the projects upon which the Action Agencies based their estimate of benefits, which were chosen together with the LCREP, using their project selection criteria. NOAA C688 at 2. NOAA noted that of "primary importance" is the commitment to achieve the estuary survival improvements by implementing projects selected through the LCREP process.[45/] *Id.*

Finally, Plaintiffs assert that the estimated benefits improperly assign a survival increase or benefit to actions that protect existing habitat, arguing that this simply would preserve the status quo but would not lead to a survival increase. NWF Br. at 37; OR Br. at 29-30. However, there are survival benefits from such protection, such as lessening the impact from water quality-related threats and the potential to lessen negative impacts of climate change. NOAA B347 at 5-2 - 5-3. It is

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[45/] Similarly, Plaintiffs note certain critiques from the ISAB's review of the Module, upon which the BiOp's benefits estimate is based. NWF Br. at 26. While the Module's 20% survival increase is a planning target, NOAA asked the ISAB to review the target's true usefulness, which is the distribution of the target increase across various management actions as a way to characterize the relative benefits of different actions. Corps A00712 at 8. The ISAB agreed that the allocation of benefits among the actions is clear and credible, contingent upon the acceptance of the clear presentation of threats, management actions, and constraints, which the ISAB found to be generally acceptable. *Id.*; *id* at 2-8. With respect to critiques concerning the adequacy of the scientific data and process, the ISAB also recognized that the science is "weak and scarce" and that measuring survival in the estuary is a "very daunting task that will have inherent variability." *Id.* at 4,8. In short, better data is always preferable but the Module does a good job at fulfilling its purpose as a planning document to guide recovery management actions. This is all that is required.

appropriate to assign a small benefit to protection projects to reflect the fact that such intact habitat likely otherwise would be degraded without protection. NOAA S76 at 5-36. At that point, significantly more effort would be required to restore the area to its current value, and years of productivity would be lost. *Id.* Accordingly, NOAA reasonably assigned a benefit to habitat protection actions.

As demonstrated above, the methodology for estimating the benefits for both tributary and estuary habitat actions fully was vetted through the collaboration process. NMFS reasonably accepted a "starter list" of projects for the 2007- 2009 period, with appropriate sideboards on future project selection, including the involvement of local and regional experts. Progress toward the habitat improvement goals will be measured through annual reports and the comprehensive evaluation reports. The bottom line is that regardless of any uncertainties in the methodology or funding, the Action Agencies are committed to achieving the respective survival increases through habitat improvement. This commitment is solid and backed up by a program that more than satisfies the "reasonably certain to occur" standard.

C. NOAA Did Not Fail to Provide a Jeopardy Analysis for Snake River Sockeye.

Plaintiffs contend that NOAA failed to provide a jeopardy analysis for sockeye. NWF Br. at 28. This, of course, is incorrect. *See* BiOp at 8.4-3 through 8.4-16; *see also* CA at 6-1 through 6-7; SCA at 8.4-1 through 8.4-24. A more accurate statement is that Plaintiffs disagree with NOAA's conclusions.

At the time of listing in 1991, one, one, and zero sockeye had returned to Redfish Lake in the three preceding years. BiOp at 8.4-5. However, even with these virtually non-existent returns, NOAA's Biological Review Team recommended that the species be listed as endangered under the ESA "to make a conservative decision in this circumstance" and "because the ESU might be restored using experimental hatchery programs." *Id.* Because of the small numbers and very limited data, not

much is known about this stock's passage through the hydrosystem. Nevertheless, during the collaboration, the sovereigns examined what could be done for sockeye including increasing juvenile fish passage survival and increasing hatchery smolt production. NOAA C.0239. Even with the limited knowledge they did have about this stock, the sovereigns arrived at a plan that incorporates various strategies to increase numbers of fish in the wild. NOAA at C.0352; C.0427; C.0509; C.0517. These discussions then were incorporated into the Action Agencies' CA/BA's, and in turn, within multiple RPA actions in the BiOp.

Most significantly, the Action Agencies will continue to fund safety-net hatcheries (of 150,000 smolts per year) and will increase their funding so that total smolt release is between 500,000 and 1 million fish. BiOp at RPA Table p. 61 (RPA 42); Corps 00404 at 007865-66 (funding committed in the Idaho Fish Accord for a hatchery to support this increased production). This approach is consistent with the best available science in that the ISRP noted that, although it had concerns with the low number of returns, "[t]he program has been successful in its goals of preserving important lineages of Redfish Lake sockeye salmon for genetic variability and in preventing extinction in the near-term. The Stanley Basin Sockeye Technical Oversight Committee has determined that the next step toward meeting the goal of re-establishing and amplifying the wild population is to increase the number of smolts released." BiOp at 8.4-9. The first phase of this program was designed to establish bloodlines while maintaining genetic diversity and reducing risks of domestication, whereas the second phase will attempt to increase adult numbers in the wild. *Id.* The RPA actions implement and build upon the Stanley Basin Sockeye Technical Oversight Comittee's plan for sockeye. Moreover, with an increase in the number of smolt releases, the Action Agencies now will be able to assess the feasibility of Passive Intergrated Transponder ("PIT")-tagging juvenile sockeye, which will in turn produce more data that will provide insight as to how best to manage this ESU. *Id.* at RPA Table p. 73 (RPA 52).

NOAA also made modifications in timing of flow augmentation (earlier, which benefits sockeye migration) and passage changes at each of the dams including surface passage at the Snake River and Lower Columbia River dams. *Id.* (RPA 18-25). In addition, Federal Defendants will be evaluating the potential for transporting adult sockeye from Lower Granite back to Sawtooth Valley lakes or artificial propagation facilities. *Id.* (RPA Action 42). While many of these modifications also are designed to aid other ESUs, these changes are instrumental in aiding this particular ESU. In fact, these actions, especially increasing hatchery production, all will benefit sockeye.

This Court is no doubt aware that SR sockeye just had its best year since 1970.[46/] While some entities claim they know the reason for this success, the truth is less clear. The fact is no one truly knows why sockeye had its best year in a long time. Of course Federal Defendants are pleased about this recent spike, but only guardedly optimistic. Salmon run numbers, and in particular sockeye numbers, fluctuate significantly. That is why Federal Defendants increased their efforts to re-build this stock in accordance with the best available science. But even within the realm of uncertainty, it can be definitively said that this package of mitigation "lessens the degree of jeopardy." *NWF v. NMFS*, 524 F.3d at 930. The action makes conditions better in accordance with the ISRP's recommendations.

IV. NOAA CORRECTLY CONCLUDED THAT THE RPA WOULD NOT ADVERSELY MODIFY CRITICAL HABITAT.

Plaintiffs recycle their jeopardy argument in the critical habitat context, arguing that NOAA must identify recovery criteria before proceeding with the adverse modification analysis. That argument is equally unsuccessful here. In addition, NOAA correctly defined the environmental baseline for the critical habitat analysis by identifying the current functioning levels of the PCEs before determining the RPA's effect on those PCEs. Finally, NOAA properly considered the benefits

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[46/] *See* 2008 fish counts for Ice Harbor.

of surface passage improvements because they are reasonably certain to occur.

A. NOAA Is Not Required to Identify Quantitative Recovery Points When Assessing Whether an Action Will Adversely Modify Critical Habitat.

Plaintiffs argue that NOAA first should have identified objective criteria and a specific time frame for recovery before assessing the RPA's effect on the conservation value of the 12 critical habitat designations. NWF argues that this Court previously held that NOAA must identify the in-river survival levels needed for recovery. NWF Br. at 41. However, the Court's ruling was not as broad as imagined. In evaluating the 2004 BiOp's analysis of the impacts to the "safe passage" element of critical habitat, the Court found that the analysis was circular due to reliance on "survival through the migratory corridor at a rate sufficient to support increasing populations up to at least a recovery level" but admissions elsewhere in the 2004 BiOp that NOAA did not know '"[t]he in-river survival rate necessary for recovery.'" *NWF v. NMFS*, 2005 WL 1278878, at *16 (citation omitted). This finding, affirmed by the Ninth Circuit, did not hold that ESA § 7(a)(2) *per se* requires NOAA to know the in-river survival rate necessary to *achieve recovery* before assessing an action's impacts on critical habitat, as Plaintiffs now argue.[47/] As with their jeopardy arguments, Plaintiffs incorrectly interpret these holdings to mean that NMFS must rigidly adhere to a quantitative formula for assessing the impacts to recovery. In so doing, Plaintiffs read requirements into the ESA that simply do not exist.

[47/] Nevertheless, these factors were considered through the COMPASS modeling which looks at the current in-river survival rates through the hydropower system, as well as the expected in-river survival rates with the RPA modifications to the hydropower system. The 93% and 96% juvenile performance standards for dam passage survival, the juvenile in-river survival metric, and the juvenile system survival performance targets all are related directly to the PCE of "safe passage" that was previously before the Court and the Ninth Circuit. BiOp Appendix 1 at 72. The hydrosystem improvements are designed to meet these standards and will contribute to placing the ESUs on a trend toward recovery. This increase in in-river survival levels also demonstrates that the safe passage PCE is not adversely modified, and is in fact, improved as a result of the RPA.

Critical habitat includes areas containing features "essential to the conservation of the species." 16 U.S.C. § 1532(5)(A)(i). In turn, "conservation" is defined as "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary," or recovery. 16 U.S.C. § 1532(3). However, the fact that critical habitat is geared toward conservation of the species does not require that the point of recovery specifically be defined before critical habitat can serve its purpose. While a critical habitat designation must describe the PCEs essential for the conservation of the species, "there is no indication in the ESA that the agency must simultaneously prepare objective, measurable criteria indicating when the ultimate goal of conservation of the species will be achieved." *Home Builders*, 2006 WL 3190518 at *18; *accord Arizona Cattle Growers' Ass'n*, 534 F. Supp. 2d at 1025-1026. Rather, as discussed above, Congress required such criteria in the context of a species' recovery plan. *Home Builders*, 2006 WL 3190518 at *18.

It logically follows that if NOAA is not required to specify the point of recovery in the critical habitat designation itself, there is no requirement to identify such criteria in the adverse modification analysis, which is to evaluate an action's effects on that critical habitat designation. 16 U.S.C. § 1536(a)(2). As with the jeopardy analysis, Plaintiffs' argument improperly would require supplementation of a critical habitat designation with the contents of a recovery plan before the adverse modification analysis could proceed. However, the Ninth Circuit has confirmed the very distinct roles of critical habitat and recovery planning. *NWF* v. NMFS, 524 F.3d at 936 (a proper consideration of recovery in the critical habitat analysis does not rise to the level of importing the recovery planning provisions). Accordingly, this Court should reject the argument that the only correct critical habitat analysis involves identification of the species' recovery needs, as such a premise improperly conflates the recovery planning and consultation processes.

While the statute does not require identification of recovery needs in order to complete the

ESA § 7 analysis, NOAA must consider the impacts on critical habitat's role in the species' recovery. However, nothing in ESA § 7(a)(2) dictates the methodology that NOAA must employ in conducting the adverse modification analysis, much less specify the mode of analysis. Rather, it is silent on the issue, leaving it to NOAA to exercise its expert judgment to fill that gap. As long as NOAA's approach is reasonable, it is entitled to deference despite Plaintiffs' preference to see it done another way. *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Serv.*, 378 F.3d 1059, 1066 (9th Cir. 2004) ("An agency's scientific methodology is owed substantial deference"). Instead of beginning this analysis with a species' likelihood of recovery, as Plaintiffs advocate, NOAA reasonably framed the analysis in terms of actions that diminish the value of the critical habitat designation itself by focusing on the conservation role played by each PCE. This method is consistent with both the statute and this Court's requirements and should be upheld.

B. NOAA Properly Assessed Whether the RPA Adversely Modifies Critical Habitat.

NWF argues that NOAA manipulated the environmental baseline, defining away virtually all impacts of dam operations by "designating" the poor conditions of the critical habitat PCEs as the "status quo" under the environmental baseline.[48/] NWF Br. at 43. NWF characterizes the BiOp's critical habitat approach as one that was invalidated entirely with the 2004 BiOp, but in so doing, misconstrues the relevant rulings, as neither court invalidated the "baseline approach" to critical

[48/] NWF argues that NOAA's critical habitat standard allows continuing degradation of PCEs "so long as they could someday become functional." NWF Br. at 44. However, they are well aware that this is not NOAA's critical habitat standard. In August 2006, NWF queried whether the interpretation advanced above was the correct interpretation of the adverse modification standard. NOAA C278 at 6. NOAA clarified that this is an incorrect reading of the standard, stating that the adverse modification determination would consider: (1) the short-term negative effects of the proposed action, in the context of the species' life cycles and migration patterns; (2) the certainty that any long-term improvements will occur; and (3) the best available science regarding survival rates for in-river juvenile migrants. NOAA B344 at 7.

habitat analysis. Rather, this Court, upheld by the Ninth Circuit, found three specific flaws with the critical habitat analysis in the 2004 BiOp, *see NWF v. NMFS*, 524 F.3d at 934, which have been rectified in the 2008 BiOp. Neither court invalidated the general approach of starting with the current condition of the critical habitat designation in order to evaluate the RPA's impact on critical habitat, which NOAA properly did here. Furthermore, NWF's argument implies that NOAA should construct a hypothetical environmental baseline with the best possible in-river conditions against which to measure the effects of the action - the same type of "reference operation" which they previously criticized and this Court and the Ninth Circuit held to be improper.

NOAA's analysis necessarily begins with asking whether critical habitat can serve its conservation role in its current condition and identifying the factors responsible for the current condition of the critical habitat, as outlined in the Hogarth Memorandum. NOAA B333 at 2-3; *see also* 50 C.F.R. § 402.02 (environmental baseline includes past and present impacts of activities in the action area). Returning to the example of SR fall Chinook, NOAA recognized that the hydrosystem is the cause of many limiting factors, such as for the PCE of "safe passage." *See e.g.*, BiOp at 8.2-11. While passage conditions for in-river migrants have improved in recent years due to the Action Agencies' past structural modifications, *id.*, NOAA did not accept the limiting factors as the "status quo." NWF Br. at 43. To the contrary, the RPA required significant habitat improvements in order to avoid adverse modification. For example, in order to address and improve the safe passage PCE, the RPA actions go significantly beyond 2007 configuration, requiring a new surface passage route at Little Goose, as well as continued evaluation of the surface passage routes at Lower Monumental, McNary, and John Day dams, in concert with "training" spill for safe juvenile egress; a long guide wall at The Dalles; changes to the adult collection channel at The Dalles; and changes to the adult ladders at John Day, McNary, Ice Harbor, Lower Monumental, and Lower Granite dams. *See* RPA Actions 18-28; BiOp, Appendix 1 at 20-31. Plaintiffs' attempts to characterize the RPA's required

habitat improvements as merely the "status quo" do not square with the record.

Nor does the BiOp employ a "boilerplate" analysis of these habitat improvements, as alleged.[49] NWF Br. at 43. Each analysis of the effects of the hydrosystem improvements on critical habitat incorporates the specific discussion of the expected effects on limiting factors in the first part of the section. *See e.g.*, 8.3-21 ("The Prospective Actions described above...," referencing discussion at 8.3-19 to 8.3-21). The critical habitat analysis then examined those effects in terms of the relevant PCEs. This pattern was repeated for the various categories of actions analyzed - tributary habitat, estuary, hatchery, harvest, predation, and research/monitoring, before analyzing the aggregate effects of all these impacts on critical habitat together with the environmental baseline and cumulative effects. *See e.g.*, BiOp at 8.3-21 - 8.3-27, 8.2-31 - 8.2-32.

NWF unsuccessfully attempts to graft conclusions concerning a very different BiOp, reviewed in *Nez Perce Tribe v. NOAA Fisheries*, No. CV-07-247-N-BLW, 2008 WL 938430 (D. Id. Apr. 7, 2008), into this Court's review.[50] NWF Br. at 45. There, the court emphasized NOAA's own conclusions that the listed species were "unlikely to persist" under the current degraded

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[49] Plaintiffs compare the discussions of impacts of the hydrosystem operations and configuration for SR spring/summer Chinook and the SR sockeye. NWF Br. at 43. Recognizing a paucity of data for SR sockeye, NOAA specifically stated that it used SR spring/summer Chinook as a surrogate for estimating the effects of hydrosystem improvements in the mainstem migration corridor. BiOp at 8.4-17. It is hardly surprising then, that the critical habitat impacts for these ESUs are similar. For a different analysis on the impacts of the hydrosystem improvements on critical habitat, one can examine the SR fall Chinook analysis. BiOp 8.2-19 to 8.2-20.

[50] To the extent NWF contends that an action carrying forward adverse impacts cannot satisfy the critical habitat standard, *see* NWF Br. at 45, this is wrong. The Ninth Circuit clearly has held that adverse effects may progress without triggering an adverse modification finding. *See Gifford Pinchot Task Force*, 378 F.3d at 1075 (recognizing the destruction of 20,000 acres of critical habitat, but finding: "After a careful review of the record, we conclude that the FWS is correct. The BiOps considered the important local effects, analyzing critical habitat more broadly when individual effects were not important."); *Center for Native Ecosystems v. Cables*, 509 F.3d 1310, 1316-17 (10th Cir. 2007) (upholding FWS' conclusion that prescribed fires in critical habitat of the Prebles meadow jumping mouse were not likely to result in adverse modification).

environmental conditions, that critical habitat was being destroyed by the current operations, and that the current action threatened the recovery of the species. *Nez Perce*, 2008 WL 938430 at *6, *8. Based on these findings, the court found the NOAA's conclusion that no adverse modification would result from continuing the current operations for ten years, largely without change, to be arbitrary and capricious. *Id*. *8-9. The action reviewed in *Nez Perce* is completely distinguishable from the RPA here. Far from continuing an action that destroys critical habitat and threatens the recovery of a listed species, NOAA here has required numerous hydrosystem and habitat improvements as part of the mandatory RPA. Further, NOAA rationally concluded that, while some negative effects of the hydrosystem would continue into the future, the RPA substantially would improve the functioning of many of the PCEs, would not destroy or adversely modify critical habitat, and would not threaten the recovery of listed species. *See* BiOp at 8.2-31. NOAA's analysis and conclusions comply with the ESA and, in fact, go well beyond the requirement of ESA § 7.

C. NOAA Properly Relied Upon Surface Passage Improvements In Its Analysis.

For their last critique, NWF revives the now-tired refrain that not much has changed in the river. This time they allege that NOAA's analysis of safe passage improvements suffers from the same flaw found in the 2004 BiOp when this Court and the Ninth Circuit deemed the structural surface passage improvements not reasonably certain to occur. NWF Br. at 45-46 (citing *NWF v. NMFS*, 2005 WL 1278878 at *15). NWF's allegation that NOAA's assessment relies "on the same future surface bypass modifications" relied on in prior BiOps implies that past plans for surface bypass modifications have not materialized. NWF Br. at 46. However, many modifications have been implemented since the 2000 and 2004 BiOps, such as the removable spillway weirs ("RSW")[51/]

[51/] RSWs are a successful type of surface bypass system affixed to the upstream face of the dam which provide a gentler "ride" over the spillway. Testing has demonstrated that RSWs decrease juvenile delay in the forebay and increase juvenile survival as compared to other passage routes. BA at A-6 - A-7. Prototype temporary or top spill weirs ("TSWs") are a simpler design and are

at Lower Granite, Ice Harbor, and Lower Monumental in 2001, 2005, and 2008, respectively, and the Corner Collector at Bonneville in 2004. BA at A-5 - A-6, A-11, A-13; RPA Action 23; Corps A.00686 at 3-4. Additionally, TSWs have been installed in two bays each at both McNary and John Day in 2007, and in 2008, respectively. BA at A-8; RPA Actions 20-21; Peters Decl. at ¶ 28. Plaintiffs' argument is shockingly out of touch with the on-the-ground operations. There is not even a question of whether such surface passage improvements are "reasonably certain to occur," because already there are surface bypass structures at seven of the eight mainstem hydro projects with the eighth to be installed and operational at Little Goose by April 2009. Corps A01252; Corps A02675; Peters Decl at ¶ 26.

Likewise, the record belies NWF's charge that the RPAs requiring development of Configuration and Operational Plans ("COPs")[52/] for each mainstem dam are not reasonably certain to occur. In fact, the Corps has completed COPs for Bonneville, The Dalles, and John Day. Corps A00428, A04895, A02317. The Ice Harbor COP is currently under development, *see* Corps A00485-00489, and will be completed by December 9, 2008, Corps A00675. The COPs for McNary, Lower Granite, and Little Goose will be completed in 2009 and for Lower Monumental in 2010. RPA Actions 21, 23-25; Peters Decl at ¶ 39.

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more economical and potentially equally as effective. *Id.* at A-8; Corps 01156; 01157; 08273, 11314, 11317.

[52/] COPs are comprehensive plans for each mainstem dam and will guide future configuration investments and hydrosystem operations to achieve the hydrosystem passage survival targets and standards. BA at B.2.1-26. The COPs will consider multiple alternative for configuration and operation changes and will prioritize those alternatives into Phase I and Phase II actions. *Id.* Phase I modifications are anticipated to increase survival levels to meet or exceed the hydrosystem performance standards. *Id.* Phase II actions are those for further implementation, should the Phase I actions fail to meet their targets. *Id.* The operations set forth in each COP are the result of a collaborative process with the regional sovereigns, based on the best available data concerning fish passage and survival at each dam. *See e.g.*, Corps A02317 at 5.

Accordingly, NOAA properly relied on surface passage improvements in its critical habitat analysis as they are reasonably certain to occur, have a high probability of improving survival, and will be managed through adaptive management to ensure passage survival benefits at or above the performance standards.

V. NOAA RATIONALLY CONCLUDED THAT THE PROSPECTIVE ACTION IS NOT LIKELY TO ADVERSELY AFFECT THE SOUTHERN RESIDENT KILLER WHALE DISTINCT POPULATION SEGMENT.

During remand, the Action Agencies requested NOAA's concurrence that the RPA is not likely to adversely affect the Southern Resident killer whale ("SRKW") Distinct Population Segment. NOAA B90; 50 C.F.R. § 402.13(a) ("If during informal consultation it is determined by the Federal agency, with the written concurrence of the Service, that the action is not likely to adversely affect listed species ..., the consultation process is terminated, and no further action is necessary."). After an extensive review of the environmental baseline, short- and long-term effects, and cumulative effects, NOAA concurred that the RPA is not likely to adversely affect the SRKWs. BiOp at 9-21; SCA at 9-3–9-21. NOAA's analysis is sound, and its finding should be upheld.

The SRKW DPS consists of three pods (the J, K, and L pods), are found throughout the coastal waters off Washington, Oregon, California, and Vancouver Island, and are more likely to occur in coastal waters from November to May. BiOp at 9-2, 9-5--9-7, 9-9, Figure 9-1-2. SRKWs are known to consume 22 species of fish and one species of squid, *id*. at 9-7, and data derived primarily from the study of Northern Resident killer whales suggests that SRKWs prefer Chinook, "presumably because of the species' large size, high fat and energy content, and year-round occurrence in the area." *Id*. at 9-7, 9-9. Reviewing the SRKWs' diet composition, metabolic needs, and the caloric content of salmon, NOAA determined that the SRKWs require approximately 221,000 adult Chinook annually in the coastal waters within their range. *Id*. at 9-10; NOAA B372. Taking into account recent harvest levels and ocean abundance estimates, NOAA conservatively estimated

that there may be approximately 3.5 million adult Chinook available today in the coastal waters within the whales' range. *Id.* At 9-10; NOAA B372.

Threats to the SRKW DPS include "[r]eductions in food availability, increased exposure to pollutants, and human disturbance." BiOp at 9-13. Decreased abundance of salmon in coastal waters has potential fitness consequences by requiring the SRKWs to spend more energy foraging for prey. *Id*. at 9-9. "Researchers are unsure about which threats are most significant," and none of the threats, such as prey availability, "have been directly linked to or identified as the cause of the recent decline of the SRKW." *Id.* at 9-13; NOAA B364 at iv.[53/] Recognizing these uncertainties, NOAA's analysis conservatively focused on the effects of the RPA on Chinook abundance in coastal waters. BiOp at 9-9 - 9-10. Focusing on Chinook provides a conservative estimate of potential effects because the abundance of all salmon and other potential prey species is orders of magnitude larger than the total abundance of Chinook in coastal waters. *Id.* at 9-9.

Here, the FCRPS results in mortality to salmon and has the potential to indirectly affect SRKWs through alterations to the species' prey base. BiOp at 9-14. NOAA had reasonably good estimates of overall juvenile Chinook mortality in the FCRPS but was unable "to partition the overall level of mortality among the various potential causes." *Id*. at 9-16. Thus, NOAA used the *overall* mortality rates resulting from migration through the Columbia and Snake Rivers, regardless of cause.

[53/] As demonstrated above and in the BiOp, NWF overstates the available evidence when it asserts: "Perhaps the primary threat leading to the SRKW listing is the decline in abundance and availability of salmon ..." NWF Br. at 47. In fact, much of NWF's brief overstates or mischaracterizes the available data. *Compare* NWF Br. at 49 (stating the Recovery Plan found that hatchery fish "do not solve - and may even exacerbate – problems of salmon quality and availability for orcas); *but see* NOAA B364 at II-81 (Recovery Plan explaining that hatchery production has been identified as a threat to salmon populations, but has also *benefitted killer whales* by "partially compensating for declines in many wild salmon populations"); *compare* NWF Br. at 47 (stating that members of the SRKW DPS "have been regularly identified ... at the mouth of the Columbia River in particular, at certain times of the year") *with* BiOp 9-7; NOAA B364 at II-31 (since 1975, there has been only four sightings of SRKWs off of the coast of Oregon). NWF's liberal reading of the record neither supports its case nor undermines NOAA's analysis.

Id. at 9-16–9-17. "This comparison is a very conservative approach since only a portion of these moralities are, in fact, the result of the hydro operations being consulted upon." BiOp at 9-16.

The RPA is also directly responsible for increased production of Chinook through the funding of artificial propagation programs, and NOAA conservatively focused on the number of hatchery-origin Chinook returning to the Bonneville dam. BiOp at 9-15. This reference point is again conservative, as it does not take into account the additional abundance of hatchery and natural Chinook available to SRKWs in the ocean (approximately 1 million Chinook from Columbia River stocks) or those fish at the mouth of the Columbia River (approximately 800,000 Chinook) that do not all return to the dam due to natural mortality, predation, harvest, and other factors. *Id.* at 9-15, 9-17. Here, NOAA found that approximately 35% of the total annual return of Chinook above the Bonneville dam is directly attributable to the RPA's funding of hatcheries. *Id*.

With this information, NOAA evaluated both the short-term effects of the action relative to pre-action conditions, *see* BiOp at 9-15 – 9-18, as well as the long-term effects of the RPA, *id*. at 9-18–9-19. For the short-term effects, NOAA did not consider benefits to salmon expected from implementation of the RPA, and NOAA determined that hatchery production directly attributable to the RPA (over 35% Chinook returns at the Bonneville dam) is likely to fully offset the *overall* mortality of juvenile migrating Chinook in the FCRPS system (less than 35% mortality rates). *Id*. at 9-16–9-17, 9-21. Analyzing long-term effects, NOAA determined that the RPA is expected to improve survival rates and ensure that Chinook salmon will "survive with an adequate potential for recovery." *Id*. at 9-18–9-19. Thus, NOAA rationally concluded that the RPA "more than offsets losses to the killer whale prey base" and "will continue to positively affect the survival and recovery of listed salmon and steelhead and should benefit killer whales in the longer term." *Id*. at 9-21.

As a direct result of its conservative methodology, NOAA found, with a reasonable degree of certainty, that the RPA is "not likely to adversely affect killer whales." *Id.* Contrary to NWF's

portrayal of the BiOp, NOAA's analysis goes well beyond merely comparing the "current numbers of salmon from the Columbia River and the number that may result from the RPA...." NWF Br. at 51. In fact, NWF does not contest *any* of the ultimate findings reached by NOAA. Accordingly, NWF cannot demonstrate that NOAA's analysis of the best available scientific data, and its conclusions reached after a reasoned examination, are arbitrary and capricious.

A. NOAA's Analysis Considers All Relevant Factors.

Unable to demonstrate that NOAA's actual analysis or findings are arbitrary, NWF, in an argument not joined by the other Plaintiffs, opines that NOAA failed to consider issues raised in the Recovery Plan (NOAA B364) and the State of Washington's Status Report (NOAA B537). NWF Br. at 48-51. NWF's claims are unsubstantiated by the record and must fail.

First, NWF asserts that NOAA failed to consider the size, fat content, and caloric value of individual salmon and the purported differences between hatchery and wild salmon. *Id*. at 48-49. NOAA, however, expressly considered these factors. For example, NOAA explained that the available data did not permit an examination of "potential differences in biomass of individual Chinook available to SRKWs," including the size, energy content, and availability of specific runs of salmon. BiOp at 9-10. Thus, NOAA rationally relied "on abundance estimates as a proxy measure," as it consistently has done in past consultations. *Id*.[54]; *see Lands Council*, 537 F.3d at 996-97 (declining to second-guess the use of suitable habitat as a proxy for wildlife viability). As

[54] In prior BiOps expressly incorporated into its analysis, *see* BiOp at 9-10, NOAA explained that "[u]sing abundance as a measure of prey availability does not clearly address whether the overall salmon biomass has changed, since biomass is a function of the size of the fish as well as the number of fish available." NOAA B341 at 31. Further, the "available information on size is confounded by factors such as interpopulation difference, when the size was recorded, differing data sources and sampling methods, and potential differences between hatchery and wild fish." *Id*. Thus, NOAA found that "a comparative measure of prey biomass across the range of the U.S. west coast salmon stocks for SRKWs is not available and, for purposes of this Opinion, abundance estimates are used as a proxy measure, which takes into account the importance of biomass." *Id.* at 31-32.

explained above, NOAA also expressly analyzed the diet composition and metabolic needs of the SRKWs and the caloric content of salmon (both hatchery and wild) available to the SRKWs in order to conservatively estimate the amount of Chinook required by, and the amount of Chinook available to, the SRKWs within their coastal waters. BiOp at 9-4 - 9-8, 9-10; NOAA B372 at 5-8. Thus, NWF's claims that NOAA failed to consider these factors ring hollow.[55/]

Next, NWF asserts that NOAA failed to consider the seasonal availability of salmon populations. NWF Br. at 49-50. Again, NWF's arguments are belied by the record. The best available scientific data indicates that *overall abundance* of salmon in coastal waters may, in some years, be a limiting factor. *See* BiOp at 9-10; NOAA B364 at II-76 (study "reported a strong positive correlation between changes in overall coast wide Chinook abundance and combined moralities of both resident communities"). The data also showed that there is only "weak correlations between SRKW survival and abundance of" salmon on a local scale and "changes in killer whale abundance have not been linked to changes in salmon stock groups," such as Columbia River Chinook stocks. *Id*. NOAA rationally accounted for these factors by assessing conservatively the abundance of Chinook available to SRKWs *across their coastal range* during late-fall to early spring, when SRKWs are most likely to occur in coastal waters. *Id*. at 9-5–9-7, 9-9.

NWF also errs in arguing that the Recovery Plan "notes the decline of high-fat spring and summer Chinook salmon in the Columbia River as an example where 'resident killer whales may

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[55/] NWF's reliance on Washington's Status Report to argue broadly that hatchery salmon are "often smaller and 'lack the heavier fat deposits of the wild fish'" is not accurate. NWF Br. at 49-50. The Status Report actually states: "In at least a few populations, hatchery salmon differ from wild salmon in their energy value for killer whales by lacking the heavier fat deposits of the wild fish." NOAA B537 at 47. The Status Report goes on to identify Puget Sound populations, not any hatchery stocks from the Columbia River. *Id.* NWF's selective and misleading reliance on the Status Report fails, as NOAA expressly considered the size and energy content of all salmon, whether hatchery or wild, available to SRKWs, and NOAA accounted for uncertainties by using abundance levels as a proxy measure. BiOp at 9-7--9-10, 9-17.

have lost some seasonally important sources of prey.'" NWF Br. at 49. While the Recovery Plan notes the "declines in some of high-fat spring and summer chinook salmon" since the 1800s, the Recovery Plan states that there is "much uncertainty about . . . year-round prey selection, whether specific stocks of fish [*i.e.,* Columbia River stocks] are important, and prey numbers required to achieve recovery of the population." NOAA B364 at II-86. Further, the Recovery Plan explains that "*fluctuations* in the abundance of [Chinook and chum salmon] may limit the [SRKWs'] population in some years. *Id*. (emphasis added). There is no evidence that specific runs, or salmon production generally, within the Columbia River has limited or is limiting the abundance of SRKWs, and NWF points to none. *See* BiOp at 9-10 (data indicate overall Chinook abundance is magnitudes greater than the whales' prey needs); NOAA B364 at II-82 (noting overall salmon abundance from the Columbia River has remained more or less constant since 1938).

Similarly, NWF inaccurately characterizes the Recovery Plan by asserting that hatcheries can result in compressed run timing "so that nearly all the fish return over a short period of time." NWF Br. at 50. The Recovery Plan actually cited "several Washington populations of hatchery coho salmon," where the evidence showed that run timing was condensed by six weeks. NOAA B364 at II-83. The Recovery Plan cited no evidence that the run timing of Columbia River hatchery-origin stocks similarly has been similarly compressed, and the best available scientific data refutes this assumption. *See* BiOp at 9-10 (finding no evidence "suggesting that SRKWs would be affected differently by consuming natural or hatchery salmon," for instance through compressed run timing of hatchery stocks); *see also* BOR 001 at 18 (evidence for Columbia River stocks shows only a four-day compression in some runs, and an expansion of others).

In sum, NWF disregards NOAA's actual analysis and instead relies on misleading characterizations of the record. These challenges fail, particularly where, as here, NOAA engaged in a detailed evaluation of the best available scientific data, including data contained in the Recovery

plan and "new data that became available more recently," and employed a conservative methodology to analyze the likely effects of the RPA on the SRKWs. BiOp at 9-3, 9-10. NOAA's findings, based on a rational and explained methodology and utilizing the best available scientific data, are entitled to considerable deference and should be upheld. *Lands Council*, 537 F.3d at 993 (reviewing court is most differential when the federal agency is "making predictions, within its [area of] special expertise, at the frontiers of science." (citations omitted)).

B. NOAA's Analysis Is Comprehensive And Complies With The ESA.

The remainder of NWF's challenge rests solely on the flawed premise that NOAA should have engaged in formal consultation on the SRKWs. *See* NWF Br. at 51-53. The informal consultation procedures constitute an appropriate means of complying with the ESA, as a "proposed action" – like the RPA here – found not likely to adversely affect a listed species will, by definition, satisfy the ESA's substantive commands. *See NWF v. NMFS*, 2005 WL 1278878 at *12 (D. Or. 2005); *Pacific Shores Subdivision California Water Dist. v. U.S. Army Corps of Eng'rs*, 538 F. Supp. 2d 242, 256 (D.D.C. 2008). Therefore, NWF's bald assertion that more analysis was required has no basis in law and must be rejected, especially when NWF does not even contend that NOAA's ultimate findings are irrational *See* NWF Br. at 51-53.

Finally, NWF seeks to stretch the ESA too far by arguing that NOAA was required to consider the historical decline of Columbia River salmon seen between the mid-1800s and the early-to mid-1900s as an effect of the RPA. NWF Br. at 52. On this point, the Ninth Circuit clearly has held that the "'agency action' at issue" does not "include all independent or baseline harms to listed species." *NWF v. NMFS*, 524 F.3d at 930. Rather, "[t]o 'jeopardize' - the action ESA prohibits - means to 'expose to loss or injury' or to 'imperil.' Either of these implies causation, and thus some new risk of harm." *Id*. The historical decline in Columbia River stocks was attributable to a combination of past natural and anthropogenic factors (many of which are unknown), NOAA B364

at II-82, and these historical actions are clearly not an "effect" of the proposed 2008-2018 operations of the FCRPS. *See, e.g., Department of Transp. v. Public Citizen*, 541 U.S. 752, 770 (2004) ("where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect.").[56/] Thus, NWF's claim that NOAA was required to attribute these historical effects to the RPA lacks merit and must fail.

VI. CWA SECTION 401 CERTIFICATION IS NOT REQUIRED BECAUSE THE ITS IS NOT A LICENSE OR PERMIT THAT AUTHORIZES ACTIVITY THAT MAY RESULT IN DISCHARGE INTO NAVIGABLE WATERS.

NWF advances the novel theory that the incidental take statement ("ITS") issued by NOAA as part of the BiOp is a "permit" to conduct "activity . . . which may result in any discharge into the navigable waters" and thus requires certification pursuant to CWA § 401 from the states of Oregon, Washington, Idaho, and Montana that the activities authorized by the ITS will comply with applicable state water quality standards. 33 U.S.C. § 1341(a)(1). In the 36 years since its enactment, CWA § 401 has never been applied to an ITS,[57/] and NWF's theory finds no support in either the CWA or the ESA.

As explained below, an ITS is not a "license or permit" as that term is used in either the ESA or in CWA § 401. Section 7 of the ESA is not a permit program, the action agencies are not "applicants" for an ITS, and the proposed action is neither approved by NOAA nor authorized by the ITS. Rather, ESA § 7 establishes a consultation process, and an ITS that may result from that process

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[56/] In fact, the scientific data indicate that Columbia River Chinook "abundance has remained more or less constant since dam counts began after the completion of the Bonneville dam in 1938" and that "[a] trend analysis of total adult returns to the mouth of the Columbia River for the period 1980-2007 shows a slight increase in abundance." NOAA B90 at 10-11. Thus, the historical decline in Columbia River stocks referred to by NWF pertains to *historical* actions and effects.

[57/] Nor did any of the States in this case ever suggest, either during the recent remand or at anytime prior to that, that CWA § 401 certifications were required for operation of the FCRPS.

is merely an exemption from potential liability under ESA § 9 for incidental take of a listed species in connection with an otherwise lawful activity. Even if the ITS could be interpreted as a permit authorizing the incidental take of protected species, CWA § 401 does not apply because an incidental take does not result in discharge into navigable waters. Neither does the ITS authorize the operation of the FCRPS. The operation of the FCRPS is authorized directly by Congress, and no license or permit is required.

A. The ITS is Not a "Permit" Within the Meaning of the Endangered Species Act.

Section 7 of the ESA requires the Action Agencies to ensure that their action is not likely to jeopardize the continued existence of a listed species, or adversely modify its critical habitat. 16 U.S.C. § 1536(a)(2). It establishes a consultation process through which NOAA may assist the federal agencies in making that determination, but NOAA's role is limited to that of as a consulting agency, not a permitting authority. Accordingly, ESA § 7 is not a permit program, and NOAA is not a permitting authority under § 7. Similarly, the Corps and BOR are not "applicants" for the ITS. The ESA's implementing regulations define "applicant" as a person "who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action." 50 C.F.R. § 402.02. Neither the Corps nor BOR require formal approval from NOAA or any other federal agency to conduct FCRPS operations, and they need not apply for nor obtain any license or permit to operate the dams.[58/]

An ITS is not a "license or permit" because it does not authorize any activity. Rather, it

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[58/] In fact, an agency cannot even begin the ESA consultation process, which may lead to the issuance of an ITS, unless it already has independent statutory or regulatory authority to take an action in the first instance. *See* 50 C.F.R. § 402.02 (defining "action" as "activities or programs of any kind *authorized, funded, or carried out*, in whole or in part, by Federal agencies") (emphasis added). The authorization for proposed action that is subject to consultation stems from and is provided for by the organic statute that governs the agency's underlying action (here the Congressional authorizations for construction and operation of the dams).

provides only an exemption from potential ESA § 9 liability for the incidental take of protected species associated with otherwise lawful activity. The ITS does not authorize the underlying action or for that matter, even affirmatively grant authorization to take species. It simply provides that if the terms and conditions contained in the ITS to minimize the impacts are complied with, any take that occurs during the otherwise authorized activity will "not be considered to be a prohibited taking of the species concerned." 16 U.S.C. §§ 1536(o); 1536(b)(4); s*ee also Center for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 450 F.3d 930, 942 (9th Cir. 2006) (a BiOp and accompanying ITS do no more than constitute compliance with the ESA; they do not say anything about an action's compliance with other laws).

Both NOAA and FWS, the co-administrators of the statute, have interpreted an ITS as a limited exemption from potential liability, rather than as a license or permit affirmatively authorizing underlying actions or take of listed species. In the preamble to the 1986 Regulations governing the ESA § 7 consultation process, the agencies explained:

> If the action proceeds in compliance with the terms and conditions of the incidental take statement, then any resulting incidental takings are exempt from the prohibitions of section 4(d) or 9 of the Act. No permit is required of the Federal agency or any applicant in carrying out the action, as one commenter contended. The biological opinion, plus the incidental take statement, operate as an exemption under section 7(o)(2) of the Act.

51 Fed. Reg. 19,926, 19,953 (June 3, 1986). This reasonable interpretation of the statute is entitled to deference. *National Ass'n of Homebuilders,* 127 S.Ct. at 2533-35 (ESA § 7 regulations are entitled to *Chevron* deference). Similarly, NOAA's Consultation Handbook[59/] confirms that an ITS exempts

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[59/] *See* The U.S. Fish and Wildlife Service and National Marine Fisheries Service Final Endangered Species Act Consultation Handbook, Procedures for Conducting Section 7 Consultations and Conferences (March, 1998), U.S. Government Printing Office, Washington, D.C., ISBN 0-16-049596-2. The Consultation Handbook is in the NOAA administrative record for the 2000 BiOp at C 306 and can be found on the NOAA website at http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf(last visited Oct. 24, 2008).

action agencies from the ESA § 9 prohibitions if they comply with the reasonable and prudent measures and the implementing terms and conditions of the ITSs. Handbook, pp.4-47, 4-48, 4-55.[60/]

Consistent with the regulations and the Handbook, NOAA specifically applied this interpretation to the ITS issued to the action agencies in this case. In response to comments on the BiOp, NOAA explained that "NOAA Fisheries' incidental take statements attached to biological opinions for federal actions are not permits." NOAA C1155, Response 23-A. NOAA's conclusion is a reasonable interpretation of the statute, consistent with the regulations and the Handbook, and is neither arbitrary nor capricious. Accordingly, NOAA's interpretation is entitled to deference. *Long Island Care at Home Ltd. v. Coke*, 127 S.Ct. 2339 (2007).

The Ninth Circuit has also recognized the limited role of an ITS. In *Center for Biological Diversity*, the Ninth Circuit expressly rejected the notion that an ITS can be used as a vehicle to ensure an action agency's compliance with state and Federal laws other than the ESA, noting specifically that the function of a BiOp and accompanying ITS is limited to ensuring compliance with the ESA. 450 F.3d at 942 ("an ITS does not immunize its holders for violations of any other law, be it state or federal"); *see also Arizona Cattle Growers v. USFW*, 273 F.3d 1229, 1239, 1242 (9th Cir. 2001) ("the sole purpose of the Incidental Take Statement is to provide shelter from Section 9 penalties" and describing ITS as a "safe harbor"); *ONRC v. Allen*, 476 F.3d 1031, 1033 (9th Cir. 2007) (describing an ITS as a "limited exemption from penalties under certain circumstances"). Notably, there is no suggestion that an ITS serves as a permit or license for activities or operations covered by other statutes or even as an authorization for take. Rather, consistent with the statute, regulations,

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[60/] Because the Handbook was subject to notice and comment, it is also entitled to *Chevron* deference. *See Northwest Ecosystem Alliance v. U.S. Fish and Wildlife Serv.*, 475 F.3d 1136, 1141 (9th Cir. 2007) (policy which went through public notice and comment procedures afforded *Chevron* deference). At minimum, the Handbook is entitled to *Skidmore* deference. *See*, *PCFFA v. Gutierrez*, No. 06-cv-245, 2008 WL 2851568, at *10-11 (E.D. Cal. July 18, 2008) (affording *Skidmore* deference to NOAA's interpretation as set forth in the Consultation Handbook).

and NOAA's interpretation, the Ninth Circuit has treated an ITS for what it is: an exemption from liability for take incidental to otherwise authorized activities. This conclusion is not undercut by the dicta in *Bennett v. Spear*, 520 U.S. 154 (1997)[61/] and *Ramsey v. Kantor*, 96 F.3d 434 (9th Cir. 1996).[62/] In neither case did the Court address the term "license or permit" as used in the CWA -- and in neither case was a CWA § 401 state certification required. The *Bennett* and *Ramsey* Courts' analogizing of an ITS to a permit took place in wholly distinct contexts that are inapposite to the case here. NWF's attempt to extrapolate those statements to the situation here simply does not withstand scrutiny.

Finally, it just makes no sense to interpret an ITS as a permit requiring compliance with the CWA § 401 certification process. The certification requirement would then apply only when the project was expected to result in the incidental take of listed species, thus triggering the requirement for an ITS. But the same operation in an area that was not expected to result in the incidental take of listed species would not require an ITS and thus would not require CWA § 401 state water quality certification. There is no logical basis to require a certification of water quality in one case and not in the other, because the operation would have the same impact on water quality - whether or not it

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[61/] The *Bennett* Court described the ITS as a "permit" only in the context of standing, stating that the BiOp and its associated ITS were sufficiently concrete to establish causation and redressibility for the purposes of standing. *Bennett* did not address, nor did it purport to opine on, the legal status of an ITS for the purpose of triggering other substantive statutory requirements. And, as noted above, the Ninth Circuit has on several occasions subsequent to the *Bennett* decision clarified that the ITS is an exemption, and not an affirmative authorization.

[62/] The *Ramsey* court did not describe an ITS as a permit at all, but characterized it as "functionally equivalent to a permit" and thus requiring a NEPA analysis. Moreover, *Ramsey* has been later distinguished by several cases which held that an ITS is not a 'major federal action' triggering NEPA compliance because it does not authorize the activity which results in incidental take. *See City of Santa Clarita v. DOI*, No. 02-697, 2006 WL 4743970 (C.D. Cal. Jan. 30, 2006) *19 (citing *Southwest Ctr for Biological Diversity v. Klasse*, CV-S-97-1969 (GEB JFM (E.D.Cal.1998), *aff'd* 249 Fed. Appx.. 502 (9th Cir. 2007); *Westlands Water Dist. v. U .S. Dep't. of the Interior*, 275 F. Supp. 2d 1157, 1221 (E. D. Cal.2002) aff'd in part, rev'd in part on other grounds, 376 F.3d 853 (9th Cir. 2004); *Miccosukee Tribe of Indians. v. U.S.*, 430 F. Supp. 2d 1328, 1335 (S.D. Fla. 2006).

was likely to adversely affect the species. The CWA § 401 certification process should not turn on the presence of listed species.

B. The ITS is Not a "license or permit" Within the Meaning of CWA § 401 Because It Does Not Authorize Any "activity . . . which may result in discharge to navigable waters".

As indicated above, an ITS is not a "license or permit" as that term is used in the ESA. Nor can it be considered a "license or permit" as defined in the CWA. Regulations promulgated pursuant to the CWA provide that: "'License or permit' means any license or permit granted by an agency of the Federal Government *to conduct any activity which may result in any discharge into the navigable waters of the United States*." 40 C.F.R. § 121.1(a) (*emphasis added*). As explained above, an ITS does not authorize any activity at all. But even the activity for which the ITS provides an exemption -- the incidental take of protected species -- is not an activity that "may result in any discharge into the navigable waters." 33 U.S.C. § 1341(a)(1).

NWF argues that compliance with CWA § 401 is required because the operation of the FCRPS is an activity that may result in discharge to navigable waters, relying on *S.D. Warren Co. v. Maine Bd. of Envtl. Prot.*, 547 U.S. 370 (2006) (the operation of hydroelectric dam may result in discharge into navigable waters). However, the operation of the hydroelectric dam in the *S.D. Warren* case was authorized by a FERC license, which triggered the CWA § 401 state water quality certification requirement because a FERC license is a "license or permit" to conduct an "activity" that "may result in any discharge into the navigable waters." *See also Alabama Rivers Alliance v. FERC*, 325 F.3d 290 (D.C. Cir. 2003) (CWA § 401 certification required for amendment to a FERC hydropower license because it permitted an increase in the rate of discharge of water through the turbines that would result in discharge) amended by 2003 WL 21999892 (F.E.R.C. 2003); *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 709 (1994) ("Because a federal [FERC] license is required, and because the project may result in discharges into the [navigable

water], petitioners are also required to obtain state certification of the project pursuant to § 401 of the Clean Water Act.").[63] In each of these cases, the CWA § 401 certification requirement was triggered by the application for a FERC license - not an ITS. But a FERC license is not required for the operation of the FCRPS, because the construction, operation, and maintenance of the FCRPS is authorized by Congress.[64]

The NWF analysis requires the Court to ignore the plain language of the statute. It is not the fact of potential discharge from the activity - the operation of a dam - that triggers compliance with CWA § 401. Rather, it is the application for a license or permit to conduct the activity - the FERC license - that triggers the CWA § 401 certification requirement. Because the Action Agencies do not require a FERC license to operate the FCRPS, they are not "*applicant[s]* for a Federal *license or permit* to conduct any *activity* . . . *which may result in any discharge* into the navigable waters." CWA § 401, 33 U.S.C. § 1341 (*emphasis added*).

In an effort to avoid the fatal flaw in their reasoning – the absence of a FERC license requirement – NWF suggests that the ITS is a license or permit to conduct the activity that may result in discharge. NWF Br. at 58. However, the ITS does not authorize the operation of the FCRPS. As discussed earlier, it simply provides a limited protection from potential liability under ESA § 9 for incidental take of listed species. The ITS has neither the purpose nor the effect of a FERC license to operate a hydropower dam.

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[63] However, not all FERC licenses will trigger the CWA § 401 certification requirements. It is only those licenses that may result in discharge to navigable waters. *See, e.g.*, *North Carolina v. FERC*, 112 F.3d 1175, 1188 (D.C. Cir. 1997) (CWA § 401 certification not required for FERC license amendment allowing new water withdrawal because withdrawal is not a discharge); *California Trout, Inc. v. FERC*, 313 F.3d 1131, 1136 (9th Cir. 2002) (CWA § 401 certification not required for temporary annual license issued by FERC during pendency of 50-year hydroelectric facility re-licensing because it is a "ministerial and nondiscretionary act.")

[64] The FCRPS project authorities are identified in the BA in Section B.1. *See* Attachments B.1-1, B.1-2, B.1-3, B.1-4, B.1-5; pages B.1-1-1 through B.1-5-17.

The statutory requirement that the activity "may result in discharge" implies causation, indicating that the discharge must "arise as a consequence." *North Carolina v. FERC*, 112 F.3d at 1188 (quoting Webster's New Int'l Dictionary (3d ed. 1961). The discharge from the FCRPS does not arise as a consequence of the ITS. The discharge arises as a consequence of the existence of the dams. *See NWF v. Corps of Eng'rs*, 384 F.3d 1163, 1179 (9th Cir. 2004). The FCRPS has been operating (and thus discharging) for many years – long before the ESA was enacted and before the listing of Columbia Basin salmon and steelhead. The issuance of an ITS following the ESA § 7 consultation process did not authorize the "discharge" into navigable waters that had occurred long before any ITS was required, nor does the ITS authorize any future discharge. *North Carolina v. FERC*, 112 F.3d 1175 (amendment to a FERC license did not trigger the CWA § 401 certification requirement because the discharge had already been authorized). There is simply no causal connection between the ITS and the discharge; rather, the operation of the dams results in the discharge, and the ITS merely provides protection from potential liability associated with incidental take that may result from that activity.

C. Requiring 401 Certification for An ITS Would Be Inconsistent With the Statutory Purposes and Legislative Intent of Both the ESA and the CWA.

The purpose of CWA § 401 is to give the states an active role in the issuance of federal licenses or permits that may effect water quality. The provision traditionally has been applied to federal licenses and permits that directly authorize the activity resulting in a potential discharge, such as NPDES permits issued by EPA pursuant to CWA § 402 and discharge permits issued by the Corps pursuant to CWA § 404.[65/] Courts have declined to extend the CWA § 401 certification requirements

[65/] As noted above, it also has been applied to FERC licenses, but only when the licensed activity may result in discharge to navigable waters. CWA § 401 certification has also been required for a Plan of Operation issued by the U.S. Forest Service authorizing in-stream placer mining, where it was not disputed that the authorized activity would result in discharge to navigable waters. *Hells Canyon Pres. Council v. Haines*, No. 05-1057, 2006 WL 2252554 at *4 (D. Or. Aug. 4, 2006).

to discharges from non-point sources or to non-point source runoff that may effect water quality. *See, e.g., Oregon Natural Desert Ass'n v. Dombeck*, 172 F.3d 1092, 1093-94 (9th Cir. 1998) (grazing permit does not require CWA § 401 certification even though the run-off of pollutants resulting from the grazing may impact water quality). The provision should not be expanded to include an ITS.

Application of CWA § 401 to an ITS could result in irreconcilable conflicts between the statutes. CWA § 401 gives states the right to impose conditions on federally licensed or permitted activities as may be necessary to protect water quality, or even to veto the project. Such authority applied to an ITS could lead to either implicit repeal of statutory provisions or illogical results in several ways.

First, the issuance of the ITS is mandatory and does not allow for a veto power by the states, as might occur under CWA § 401. The ESA directs that the Secretary "shall provide" an ITS if the three criteria in ESA § 7(b)(4) are satisfied. 16 U.S.C. § 1536(b)(4). *See ONRC v. Allen*, 476 F.3d at 1036 ("The FWS *must* issue an [ITS] if the BiOp concludes no jeopardy to listed species . . . but the action is likely to result in incidental takings") (emphasis added). *Center for Biological Diversity*, 450 F.3d at 942 ("According to the ESA, once the Service is satisfied that an agency's action will not threaten an endangered species' continued existence, it *must* issue the ITS.") (emphasis in original). The CWA § 401 certification requirement would effectively add another criterion to those listed in § 1536(b)(4) and conflict with the statutory mandate to issue the ITS if all criteria are satisfied. The Supreme Court has recently addressed similar circumstances in *National Assn. of Home Builders*, 127 S.Ct. at 2532-33. There, CWA § 402(b) established a mandate for EPA to transfer permit authority to states upon satisfaction of specific statutory criteria. Because of the mandatory language, EPA could not add another condition to the statutory criteria based on the ESA. *See also California Trout, Inc.*, 313 F.3d at 1136 (CWA § 401 certification not required because issuance of the license was a "ministerial and nondiscretionary act").

Second, applying the CWA § 401 certification requirement to the ITS could lead to irreconcilable conflict because some of the conditions that may be imposed by states pursuant to the CWA § 401 certification process may not be imposed as conditions on an ITS. CWA § 401(d) authorizes states to impose conditions that "relate to water quality" or "affect[] water quality in one manner or another." *American Rivers, Inc. v. FERC*, 129 F.3d 99, 107 (2nd Cir. 1997). However, NOAA only has authority to require "reasonable and prudent measures" to minimize the incidental take of the listed species as conditions on an ITS. 16 U.S.C. § 1536(b)(4)(C)(ii) ("the Secretary shall provide . . . a written statement that – (i) specifies the impact of such incidental taking on the species [and] (ii) specifies those reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact."). "Reasonable and prudent measures" must only involve minor changes to the project to reduce the level of any take. See 50 C.F.R. § 402.14(i)(2) and Handbook, p. 4-53. An ITS cannot be conditioned in a manner that would effectively stop the proposed actions. *Arizona Cattlegrowers*, 273 F.3d at 1240 (FWS cannot condition an ITS to effectively stop the proposed action). Thus, NOAA does not have authority to require project modifications to address water quality issues that may be raised in a CWA § 401 certification process.

Third, the ESA consultation process generally is to be accomplished within 90 days, and may be extended to no more than 150 days without the applicant's consent. 16 U.S.C. § 1536(b)(1). By contrast, the CWA § 401 certification process may take up to one year. 33 U.S.C. § 1341(a)(1) (certification requirements deemed waived if State "fails or refuses to act on a request for certification within a reasonable period of time (which shall not exceed one year"). The Ninth Circuit has rejected previous attempts to impose CWA § 401 requirements where the one year time frame would conflict with other statutory obligations. *California Trout Inc.*, 313 F.3d at 1137 (rejecting application of CWA § 401 because the one year time frame for certification "would, as a practical matter, amount to a partial repeal by implication of the annual license provisions.").

Moreover, the absence of a CWA § 401 certification requirement does not deprive the states of the ability to participate in the process and protect water quality standards. State water quality standards are applicable to federal agencies and federal agencies are subject to the provisions of CWA § 313 to the same extent as private parties.[66/] 33 U.S.C. § 1323. In this case, the states participated fully in the remand process, and provided significant input regarding water quality and other issues of concern to the states.[67/]

CONCLUSION

It is unfortunate that litigants like NWF view Federal Defendants' and the regions' recent efforts as some kind of joke about a movie. NWF Br. at 59. Thousands of hours, tallied among Federal, State, and Tribal biologists, were spent dissecting and analyzing the needs of these 13 ESUs. As a result, hard decisions were made and significant amounts of money will be spent. Even so, Federal Defendants acknowledge that not every party got what it wanted out of this remand. Oregon and the Nez Perce Tribe have different views as to how Federal Defendants should manage these rivers, and we respect those views. No one sovereign can say with absolute certainty that its view about salmon is the right view. Perhaps more than any other sovereign, Federal Defendants learned that lesson.

[66/] Although the Corps and BOR must attempt to meet state water quality standards in FCRPS operation, if exceedences occur as a result of the operation despite good faith and diligent efforts to avoid such exceedences, those exceedences cannot be construed as violation of CWA and the FCRPS operation can still go forward. *NWF v. Corps of Eng'rs*, 384 F.3d at 1179.

[67/] For example, the Corps and BOR have coordinated significantly with the states with respect TDG issues (*see, e.g.*, Corps 02795, 02796, 01859, 00858, 00086, 00093, 00145, 00146, 00256, 00260, 00361, 00863, 01072, 01093, 05311, 05334, 05789, 03843, 00169, 00204; BOR 05686, 05647, 05644) and with respect to water temperature concerns (*see, e.g.*, Corps 05631, 05701, 05699, 05636, 05569, 05512, 04482, 04827; BOR 004123, 012584, 031180, 033952). The Corps is continuing to coordinate, through the Regional Forum Water Quality Team (including participation by the U.S. EPA and the states of Idaho, Oregon and Washington) in activities associated with the development of a temperature TMD for the lower Columbia and Snake rivers.

As evidenced throughout this process, NOAA and the Action Agencies listened to this Court, and in turn, listened to their fellow sovereigns. Collectively an RPA was crafted that not only ensures these salmon will survive, but that they will continue to grow and one day recover. Federal Defendants cannot say exactly when recovery will be achieved, but Defendants can say definitively that this package of mitigation will halt the decline of these ESUs and reverse that trend. That is why this BiOp enjoys more regional consensus than any other salmon plan, at any other time. It is an unwavering commitment backed by science and it complies with the ESA. This biological opinion should be upheld.

Respectfully submitted: October 24, 2008.

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CERTIFICATE OF SERVICE

Pursuant to Local Rule Civil 100.13(c), and F.R. Civ. P. 5(d), I certify that on October 24, 2008, the foregoing will be electronically filed with the Court's electronic court filing system, which will generate automatic service upon on all Parties enrolled to receive such notice. The following will be manually served by overnight mail:

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