

S. AMANDA MARSHALL
United States Attorney
COBY HOWELL, Senior Trial Attorney
U.S. Department of Justice
c/o U.S. Attorney's Office
1000 SW Third Avenue
Portland, OR 97204-2902
Tel: (503) 727-1023 | Fax: (503) 727-1117
Email: Coby.Howell@usdoj.gov

JOHN C. CRUDEN, Assistant Attorney General
SETH M. BARSKY, Section Chief
MICHAEL R. EITEL, Trial Attorney
ANDREA GELATT, Trial Attorney
U.S. Department of Justice
Environment & Natural Resources Division
Wildlife & Marine Resources Section
999 18th Street, South Terrace, Suite 370
Denver, Colorado 80202
Tel: (303) 844-1479 | Fax: (303) 844-1350
Email: Michael.Eitel@usdoj.gov; Andrea.Gelatt@usdoj.gov

*Additional Attorneys listed on the signature page
Attorneys for Federal Defendants*

UNITED STATES DISTRICT COURT
DISTRICT OF OREGON
PORTLAND DIVISION

NATIONAL WILDLIFE FEDERATION, et al.,

Plaintiffs,

v.

**NATIONAL MARINE FISHERIES SERVICE, et
al.,**

Defendants.

Case No.: 3:01-CV-00640-SI

**FEDERAL DEFENDANTS'
REPLY IN SUPPORT OF
CROSS-MOTION FOR
SUMMARY JUDGMENT**

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
ARGUMENT	3
I. NMFS’S JEOPARDY AND ADVERSE MODIFICATION ANALYSES COMPLY WITH THE ESA.....	3
A. NMFS Rationally Interpreted And Applied The ESA’s Jeopardy Mandate.....	3
1. <i>NMFS’s Jeopardy Inquiry Complies With The Law.</i>	3
2. <i>NMFS’s Jeopardy Analysis Is Reasoned, Supported, And Entitled To Deference.</i>	8
B. NMFS Rationally Interpreted And Applied The ESA’s Adverse Modification Mandate.....	12
1. <i>NMFS’s Adverse Modification Inquiry Complies With The Law.</i>	12
2. <i>NMFS’s Adverse Modification Analysis Considers Relevant Factors And Relies On The Best Available Scientific Evidence.</i>	15
II. NMFS RATIONALLY ADOPTED THE REASONABLE AND PRUDENT ALTERNATIVE AND CONSIDERED ALL RELEVANT FACTORS.....	17
A. NMFS’S Analysis Of The RPA Habitat Actions Is Sound.	20
1. <i>NMFS’s Consideration Of The Implementation Of The Tributary Program Was Reasonable.</i>	23
2. <i>NMFS’s Consideration Of The Implementation Of The Estuary Program Was Reasonable.</i>	25
B. NMFS Properly Concluded That The Tern, Cormorant, And Kelt RPA Actions Are Reasonably Certain To Meet The BiOp Targets.....	27
C. NMFS Rationally Considered Climate Change Impacts In Its Analysis.....	30
D. NMFS’S Consideration Of Cumulative Effects And The Environmental Baseline Is Reasonable Under The Applicable ESA Standards.	34
E. Oregon’s Arguments That NMFS Failed To Consider Relevant Factors Are Belied By The Record and Contrary to the Law.....	36

III. NMFS RATIONALLY CONCLUDED THAT THE RPA IS NOT LIKELY TO ADVERSELY AFFECT THE SOUTHERN RESIDENT KILLER WHALE DISTINCT POPULATION SEGMENT. 40

IV. RECLAMATION AND THE CORPS HAVE COMPLIED WITH THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA). 43

 A. Plaintiffs Have Waived Their NEPA Claims..... 43

 B. *NRIC*, not *Jewell*, Controls this Case..... 45

 C. Plaintiffs Demonstrate No NEPA Violation For Any RPA Action(s)..... 48

CONCLUSION..... 50

TABLE OF AUTHORITIES

CASES

<i>Adriana Int'l Corp. v. Thoeren</i> , 913 F.2d 1406 (9th Cir. 1990).....	48
<i>All. for the Wild Rockies v. U.S. Dep't of Agric.</i> , 772 F.3d 592 (9th Cir. 2014)	49
<i>Am. Rivers v. FERC</i> , 201 F.3d 1186 (9th Cir. 1999)	44
<i>Ariz. Cattle Growers' Ass'n v. Salazar</i> , 606 F.3d 1160 (9th Cir. 2010).....	26
<i>Butte Environmental Council v. U.S. Army Corps of Engineers</i> , 620 F.3d 936 (9th Cir. 2010)	13, 14
<i>Cal. Ex Rel. Imperial Cnty v. U.S. Dept. of the Interior</i> , 767 F.3d 781 (9th Cir. 2014).....	49
<i>Center for Biological Diversity v. BLM</i> , 698 F.3d 1101 (9th Cir. 2012).....	19, 24
<i>Conner v. Burford</i> , 848 F.2d 1441 (9th Cir. 1988).....	19, 38
<i>Conservation Cong. v. Finley</i> , 774 F.3d 611 (9th Cir. 2014)	44
<i>Conservation Cong. v. U.S. Forest Serv.</i> , 720 F.3d 1048 (9th Cir. 2013).....	42
<i>Daubert v. Merrell Dow, Pharms.</i> , 509 U.S. 579 (1993).....	2
<i>Dep't of Transp. v. Pub. Citizen</i> , 541 U.S. 752 (2004)	43, 45
<i>Natural Resources Defense Council v. EPA</i> , 638 F.3d 1183 (9th Cir. 2011).....	4
<i>Friends of the Norbeck v. U.S. Forest Serv.</i> , 661 F.3d 969 (8th Cir. 2011)	44
<i>Gifford Pinchot Task Force v. FWS</i> , 378 F.3d 1059 (9th Cir. 2004).....	5, 12, 14
<i>Grand Canyon Trust v. U.S. Bureau. of Reclamation</i> , 691 F.3d 1008 (9th Cir. 2012)	49
<i>Great Basin Mine Watch v. Hankins</i> , 456 F.3d 955 (9th Cir. 2006)	43
<i>Greenpeace Action v. Franklin</i> , 14 F.3d 1324 (9th Cir. 1992).....	37
<i>Ilio'ulaokalani Coal. v. Rumsfeld</i> , 464 F.3d 1083 (9th Cir. 2006)	43, 44
<i>In re Ops. of Mo. River System Litig.</i> , 516 F.3d 688 (8th Cir. 2008).....	49
<i>Inland Empire Pub. Lands Council v. U.S. Forest Serv.</i> , 88 F.3d 754 (9th Cir. 1996)	46

<i>Jones v. NMFS</i> , 2011 WL 4501956 (D. Or. Sept. 27, 2011), <i>aff'd</i> , 741 F.3d 989 (9th Cir. 2013)	42
<i>Kleppe v. Sierra Club</i> , 427 U.S. 390 (1976).....	46
<i>La Cuna De Aztlan Sacred Sites Prot. Circle v. W. Area Power Admin.</i> , 2012 WL 6743790 (C.D. Cal. Nov. 29, 2012).....	44
<i>Lamie v. U.S. Trustee</i> , 540 U.S. 526 (2004)	12
<i>Lands Council v. McNair</i> , 537 F.3d 981(9th Cir. 2008).....	14, 18, 44
<i>Lands Council v. McNair</i> , 629 F.3d 1070 (9th Cir. 2010).....	45
<i>Marsh v. Or. Natural Res. Council</i> , 490 U.S. 360 (1989)	37
<i>Martin v. Occupational Safety & Health Review Comm'n</i> , 499 U.S. 144 (1991)	6
<i>Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.</i> , 463 U.S. 29 (1983).....	1
<i>Nat'l Wildlife Fed'n v. NMFS</i> , 524 F.3d 917 (9th Cir. 2008).....	passim
<i>Nevada v. Dep't of Energy</i> , 457 F.3d 78 (D.C. Cir. 2006).....	44
<i>Nez Perce Tribe v. NOAA Fisheries</i> , 2008 WL 938430 (D. Idaho Apr. 7, 2008)	13
<i>Northcoast Env'tl. Ctr. v. Glickman</i> , 136 F.3d 660 (9th Cir. 1998)	49
<i>Northwest Environmental Defense Center v. BPA</i> , 117 F.3d 1520 (9th Cir. 1997)	43
<i>Nw. Ecosystem Alliance v. FWS</i> , 475 F.3d 1136 (9th Cir. 2007)	18
<i>Nw. Env'tl. Def. Ctr. v. NMFS</i> , 647 F.Supp.2d 1221 (D. Or. 2009)	13
<i>Nw. Res. Info. Ctr. v. NMFS (NRIC)</i> , 56 F.3d 1060 (9th Cir. 1995)	46, 47
<i>NWF v. NMFS</i> , 254 F.Supp.2d 1196 (D. Or. 2003).....	7
<i>NWF v. NMFS</i> , 839 F.Supp.2d 1117 (D. Or. 2011).....	21, 24
<i>Oceana Inc. v. Pritzker</i> , -- F.Supp.3d --, 2014 WL 7174875 (D.D.C. Dec. 17, 2014).....	7
<i>Or. Natural Res. Council Fund v. Goodman</i> , 382 F.Supp.2d 1201 (D. Or.), <i>aff'd</i> 110 F. App'x 31 (9th Cir. 2004)	26

<i>Pac. Coast Fed'n of Fishermen's Ass'ns v. Blank (PCFFA)</i> , 693 F.3d 1084 (9th Cir. 2012)	45, 46
<i>Pac. Coast Fed'n of Fishermen's Ass'ns v. NMFS</i> , 482 F. Supp. 2d 1248 (W.D Wash. 2007)	42
<i>Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation</i> , 426 F.3d 1082 (9th Cir. 2005)	38
<i>Prot. Our Cmtys. Found. v. U.S. Dep't of Agric.</i> , 845 F.Supp.2d 1102 (S.D. Cal. 2012)	49
<i>River Runners for Wilderness v. Martin</i> , 593 F.3d 1064 (9th Cir. 2010)	33-34
<i>Rock Creek Alliance v. FWS</i> , 663 F.3d 439 (9th Cir. 2011)	7, 13
<i>Russell Country Sportsmen v. U.S. Forest Serv.</i> , 668 F.3d 1037 (9th Cir. 2011).....	49
<i>Salmon Spawning & Recovery Alliance v. NMFS</i> , 342 F. App'x 336 (9th Cir. 2009)	6
<i>San Luis & Delta Mendota Water Auth. v. Jewell</i> , 747 F.3d 581, 602 (9th Cir. 2014).....	passim
<i>San Luis & Delta Mendota Water Auth. v. Locke</i> , 776 F.3d 971, 1002 (9th Cir. 2014).....	passim
<i>Sw. Ctr. for Biological Diversity v Bureau of Reclamation</i> , 143 F.3d 515 (9th Cir. 1988)	23, 40
<i>Te-Moak Tribe v. U.S. Dep't of Interior</i> , 608 F.3d 592 (9th Cir. 2010)	48
<i>Thomas Jefferson Univ. v. Shalala</i> , 512 U.S. 504 (1994).....	4
<i>Trout Unlimited v. Lohn</i> , 559 F.3d 946 (9th Cir. 2009)	8
<i>United States v. W. Radio Serv.</i> , 869 F. Supp. 2d 1282 (D. Or. 2012)	44
<i>W. Watersheds Project v. FWS</i> , 2014 WL 4853200 (D. Idaho Sept. 29, 2014)	15
<i>Westlands Water Dist. v. U.S. Dep't of Interior</i> , 376 F.3d 853 (9th Cir. 2004).....	45
<i>Wetlands Action Network v. U.S. Army Corps of Eng'rs</i> , 222 F.3d 1105 (9th Cir. 2000).....	46
<i>Wild Fish Conservancy v. Salazar</i> , 628 F.3d 513 (9th Cir. 2010).....	31
<i>WildEarth Guardians v. Jewell</i> , 738 F.3d 298 (D.C. Cir. 2013)	31
<u>STATUTES</u>	
16 U.S.C. § 1533(f)(1)(B)(iii).....	4

16 U.S.C. § 1536(a)(2)..... 13, 42
16 U.S.C. § 1536(b)(3)(A)..... 12, 14, 17, 40

CODE OF FEDERAL REGULATIONS

50 C.F.R. § 402.02 passim
50 C.F.R. § 402.12(f) 42
50 C.F.R. § 402.13 42
50 C.F.R. § 402.13(a)..... 40, 41
50 C.F.R. § 402.14(g)(2)-(3)..... 14
50 C.F.R. § 402.14(g)(3)..... 42
50 C.F.R. § 402.15(a)..... 48

FEDERAL REGULATIONS

51 Fed. Reg. 19,926 (June 3, 1986) 34
79 Fed. Reg. 27060 (May 12, 2014) 13

TABLE OF ACRONYMS

AMIP	Adaptive Management Implementation Plan
BiOp	Biological Opinion
CVP	Central Valley Project
SOR EIS	Columbia River System Operation Review Final EIS
ESA	Endangered Species Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERTG	Expert Regional Technical Group
FCRPS	Federal Columbia River Power System
FWP	Fish and Wildlife Program
HQI	Habitat Quality Improvements
ISAB	Independent Scientific Advisory Board
ISRP	Independent Scientific Review Panel
IMW	Intensively Monitored Watershed
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NWF	National Wildlife Federation
NPT	Nez Perce Tribe
NPCC	Northwest Power and Conservation Council
OR	Oregon
PCEs	Primary Constituent Elements
RPA	Reasonable and Prudent Alternative
R/S	returns-per-spawner
RTC	Response to Comments
SARs	Smolt-to-Adult Returns
SRKW	Southern Resident Killer Whale
SBU	Survival Benefit Units
VSP	Viable Salmonid Population

ADMINISTRATIVE RECORD CITATION FORMAT

NOAA A1:234	National Marine Fisheries Service's ("NMFS") 2014 Administrative Record (ECF 1959). "A1" refers to the document number on the index, and "222" refers to the bates stamp number of the cited page(s).
2008 NOAA	NMFS's 2008 Administrative Record (ECF 1480)
2008 NOAA S	NMFS's 2008 Supplemental Administrative Record (ECF 1534)
2010 NOAA	NMFS's 2010 Administrative Record (ECF 1780)
Corps 123:4567	U.S. Army Corps of Engineers' ("Corps") 2014 Administrative Record (ECF 1959). "123" refers to the document number on the index, and "4567" refers to the cited bates stamp number(s).
2008 Corps	Corps' 2008 Administrative Record (ECF 1512, 1586)
2010 Corps	Corps' 2010 Administrative Record (1780)
USBR 1234:1234	U.S. Bureau of Reclamation's ("Reclamation") 2014 Administrative Record (ECF 1959). "1234" refers to the beginning bates stamp number on the index, and "1234" refers to the cited bates stamp number(s).
2008 USBR	Reclamation's 2008 Administrative Record (ECF 1512, 1586)
2010 USBR	Reclamation's 2010 Administrative Record (1780)

COMMONLY CITED ADMINISTRATIVE RECORD DOCUMENTS

NOAA B421	2007 BA; 2007 Biological Assessment (Action Agencies)
NOAA B422	2007 CA; 2007 Comprehensive Analysis (Action Agencies)
NOAA B282	2008 SCA; 2008 Supplemental Comprehensive Analysis (NMFS)
NOAA B281	2008 BiOp; 2008 Biological Opinion (NMFS)
2008 NOAA C1155	2008 RTC; 2008 Response to Comments (NMFS)
NOAA B44	2009 Adaptive Management Implementation Plan
NOAA B286	2010 BiOp; 2010 Biological Opinion (NMFS)
NOAA C33559	2010 RTC; 2010 Response to Comments (NMFS)
NOAA A1	2014 BiOp; 2014 Biological Opinion (NMFS)
NOAA C34293	2014 RTC; 2014 Response to Comments (NMFS)
NOAA B47	2013 CE; 2013 Comprehensive Evaluation (Action Agencies)
NOAA B48	2014-2018 IP; 2014-2018 Implementation Plan (Action Agencies)
2014 Corps 11	CE/IP RTC; 2014 Response to Comments on CE/IP (Action Agencies)

INTRODUCTION

Plaintiffs' reply briefs are based on the premise that Federal Defendants did not get a single thing right since this consultation began nearly a decade ago. They spend page after page, footnote after footnote, documenting every alleged lapse in judgment by the Nation's experts on salmon and steelhead and those entrusted with the responsibility to administer the Endangered Species Act (ESA). The complaints cover the spectrum—from technical quibbles over how to use quantitative metrics on fish status, to broad legal disagreement with the very text of the ESA and its implementing regulations. While the briefs adequately set forth Plaintiffs' wide-ranging policy and scientific disagreements with the Federal Columbia River Power System (FCRPS) and the National Marine Fisheries Service's (NMFS) biological opinions, they ultimately reinforce the central problem with this legal challenge. It is neither credible nor accurate to cast every aspect of NMFS's decision as being "so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

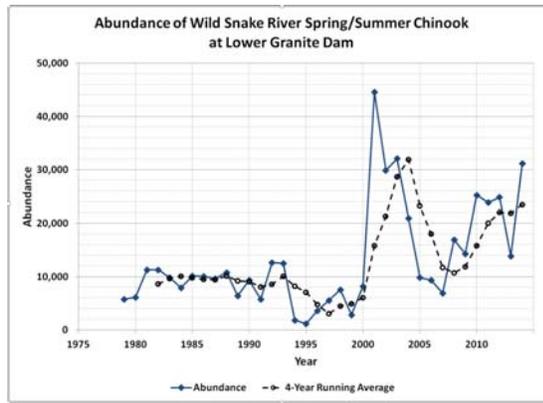
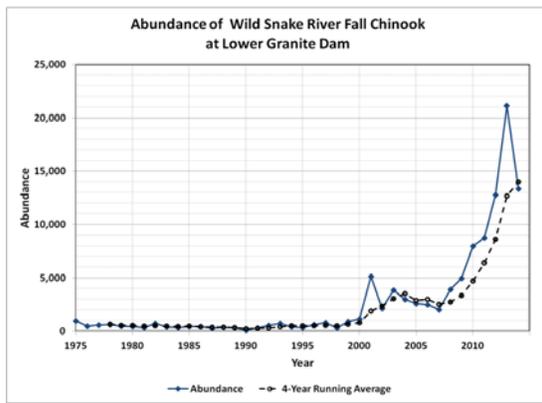
The reality is much more straightforward. Because Plaintiffs' briefs present a policy view of what they believe the ESA *should require* if they were writing on a blank slate, not a legal case on what the ESA *does require*, there are and always will be disagreements between the parties on how the ESA should be interpreted and applied. Of course, Congress charged NMFS with the responsibility to administer and interpret the ESA, not Plaintiffs. The fact that Plaintiffs pose alternative views—often dependent on rewriting the statute—is not sufficient to overcome NMFS's well-reasoned application of the law.

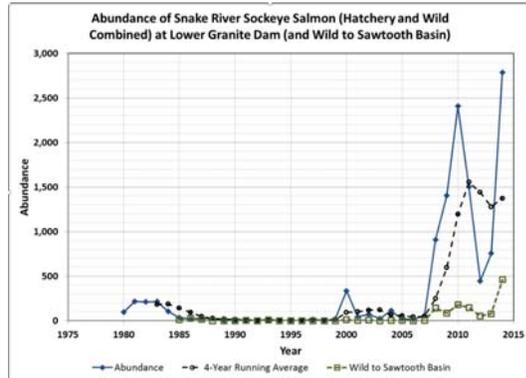
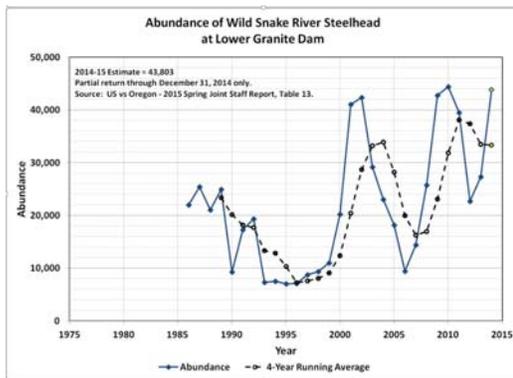
As to the scientific disagreements, these are complex issues that require extraordinary expertise and thoughtful policy considerations, often in the face of uncertainty. Facing such complexity and uncertainty, NMFS prudently chose not to adopt an approach that walks right up to the jeopardy or adverse modification line. Instead, NMFS intentionally adopted a precautionary approach that ensures the agency action—the Reasonable and Prudent Alternative (RPA)—*will not* reduce the 13 listed salmonid species' likelihood of survival and recovery or

otherwise reduce the existing conservation function of designated critical habitat. Since the inception of this ESA consultation, NMFS's experts have methodically analyzed the available science, and they allowed data, not policy agendas, to guide and inform the decision-making. The fact that NMFS's scientific analysis has been subjected to scrutiny by the regional sovereigns and their respective experts proves this point.

This cannot be said for Plaintiffs' ever-changing critiques developed for and presented here in litigation—critiques that often have not been subject to the scrutiny of the scientific community. “[S]ubmission to the scrutiny of the scientific community is a component of ‘good science,’ in part because it increases the likelihood that substantive flaws in methodology will be detected.” *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 593 (1993). In contrast to Plaintiffs' *post hoc* declarations, NMFS's analyses have been scrutinized by the region's experts, and these reviews did not detect substantive, systemic flaws with NMFS's analyses. This fact alone demonstrates that the BiOps are the epitome not of arbitrary or irrational decision-making, as Plaintiffs protest, but of cautious, deliberate, and scientifically sound analyses.

Plaintiffs also have doggedly refused to acknowledge any improvements in the hydrosystem, freshwater habitats, or the status of the fish since the 1990s. Plaintiffs' reply briefs continue this tack, attempting to paint a picture of refusal by the agencies to do what is required, and a situation of declining species dominated by hatchery stocks that are on the verge of collapse. This is a product of passion, not fact. The empirical data demonstrate improvement.





Each of the Snake River stocks that Plaintiffs focus on has shown marked improvements since the aggressive efforts to overhaul the FCRPS began in the mid-1990s. The RPA carries forward this overhaul through more aggressive implementation of actions to improve salmonid survival throughout their range. While there may be legitimate debate in the margins about *how much* this RPA will continue to improve survival and recovery, Plaintiffs cannot credibly deny that this collective suite of RPA actions—which includes FCRPS operations, configuration improvements, and a comprehensive set of mitigation actions to reduce threats and limiting factors—is improving the survival and advancing the recovery of these species. The Court should uphold this BiOp, and the region should continue implementing this RPA through 2018.

ARGUMENT

I. NMFS'S JEOPARDY AND ADVERSE MODIFICATION ANALYSES COMPLY WITH THE ESA.

Plaintiffs urge a return “back to the requirements of the ESA.” NWF Reply at 2 (ECF 2016). In the same breath, however, they re-write the statute and regulations and ask the Court to impose *their* preferred standards and methodologies in place of those NMFS has adopted in its roles of administering the ESA and interpreting its own regulations. This ignores the proper inquiry. The relevant question is whether NMFS rationally interpreted and applied the ESA’s jeopardy and adverse modification mandates in this consultation. Because NMFS did that here, the Court should reject Plaintiffs’ efforts to substantively alter the ESA’s mandates on review.

A. NMFS Rationally Interpreted And Applied The ESA’s Jeopardy Mandate.

1. NMFS’s Jeopardy Inquiry Complies With The Law.

Plaintiffs believe that NMFS should have analyzed jeopardy differently. They focus on a

single word in NMFS’s regulation—“recovery”—and proceed to construct an elaborate (and vague) approach that they contend the law requires. *See* NWF Reply at 8 (arguing that NMFS must define some version of when and how recovery will be attained, “compare” that to the effects of the RPA, and determine whether those two paths appreciably diverge).¹ Plaintiffs do not show that any of these requirements actually appear in ESA Section 7(a)(2) (which does not even use the word “recovery”) or NMFS’s own regulation (which provides only for assessment of whether the action will “reduce appreciably the likelihood of ... recovery,” 50 C.F.R. § 402.02).² Instead, Plaintiffs merely offer their own “interpretation” of NMFS’s regulation, and *then* argue that their preferred interpretation is required.

Plaintiffs misapprehend the law. Whether Plaintiffs believe their interpretation represents good policy, or “best serves the regulatory purpose,” is not relevant. *Natural Res. Def. Council v. EPA*, 638 F.3d 1183, 1192 (9th Cir. 2011); *see also Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 512 (1994) (“Our task is not to decide which among several competing interpretations best serves the regulatory purpose.”). The only “pertinent question is what choices Congress and the [agency] made when they, respectively, enacted the [statute] and promulgated implementing regulations.” *NRDC v. EPA*, 638 F.3d at 1192. Thus, the Court confronts a single question—whether NMFS’s interpretation is “plainly erroneous or inconsistent with the regulation.” *Id.* By offering a defense of their own interpretation, Plaintiffs do not present a cognizable legal

¹ Plaintiffs are not even consistent in their characterizations of what is “required.” *Compare* NWF SJ at 6 (ECF 1976) (NMFS must define biological recovery), *with* NWF Reply at 3 (NMFS must identify only one aspect of recovery—“some measure of recovery abundance.”). *Compare* NWF SJ at 10 (NMFS must identify a time frame to reaching recovery), *with* NWF Reply at 5 & n.5 (only “some approxim[at]e,” but permissibly inexact, time frame is required). Plaintiffs are imprecise because their “requirements” do not exist in the law.

² For example, the regulation defines “recovery” as “improvement in the status of listed species to the point at which listing” under the ESA “is no longer appropriate.” 50 C.F.R. § 402.02. Neither this definition, nor that defining “to jeopardize the continued existence of,” requires NMFS to define the condition of, or a time frame for achieving, biological recovery. *Id.* The only way Plaintiffs can claim otherwise is by arguing that Section 4’s recovery planning provisions should be grafted into Section 7—an argument that is contrary to law. Fed. Br. at 12-13 (ECF 2001). Indeed, Plaintiffs’ arguments would even enlarge the ESA’s recovery planning provisions, which do not require NMFS to identify a time frame within which biological recovery must occur. 16 U.S.C. § 1533(f)(1)(B)(iii) (requiring NMFS to estimate the time required to implement a recovery plan, not a time by which recovery must occur).

challenge to NMFS’s interpretation of its own regulations.

Nor do any of the reasons Plaintiffs offer in support of their interpretation demonstrate that NMFS’s approach is “plainly erroneous.” Plaintiffs believe that NMFS cannot, as a matter of law, evaluate whether a species’ “likelihood of recovery” is appreciably reduced without knowing when, or how, recovery will be attained. NWF Reply at 4-5 & nn.4-5. Yet Plaintiffs still have not identified a single case overturning a BiOp because their proposed inquiry was not performed, belying their suggestion that the inquiry is required in every ESA consultation. *See, e.g., Gifford Pinchot Task Force v. FWS*, 378 F.3d 1059, 1066 (9th Cir. 2004) (agency’s choice of methodology for assessing jeopardy “is owed substantial deference”).

More fundamentally, NMFS rigorously examined the impacts to the species’ likelihood of recovery, even if not in Plaintiffs’ preferred terms. NMFS evaluated recovery in the same way as under the ESA’s recovery planning provisions. 2008 BiOp at 7-11, 7-22. It examined the attributes of a viable salmonid population (VSP)—abundance, productivity, spatial distribution, and diversity. *Id.* at 7-22, 7-35–7-37.³ It identified the current status of the species in the context of the biological attributes indicative of recovery, and it analyzed how the agency action (the RPA) is expected to affect the species’ current conditions and its prospects for recovery (productivity trends above 1.0, limiting factors and threats reduced). *Id.* at 1-11, 7-16–7-26, 7-37–7-49. Finally, NMFS structured its inquiry to identify an RPA that will address limiting factors and reduce threats, so that the species will have an “adequate potential for recovery.” *Id.* at 1-12–1-13; *see also* 2014 BiOp at 462-63.

NMFS’s approach complies with the law. It identifies an RPA that is not likely to reduce the species’ likelihood of survival or recovery “by reducing the reproduction, numbers, or distribution of [those] species.” 50 C.F.R. § 402.02 (definition of “jeopardize the continued

³ Plaintiffs assert that, while NMFS cited the VSP factors, it did not actually “use” them. NWF Reply at 7 n.9; OR Reply at 7 (ECF 2020) (implying NMFS did not consider “diversity”). Even a cursory review of NMFS’s analysis belies these claims. *See, e.g.,* 2008 BiOp at 8.3-28–8.3-29 (analyzing productivity metrics, abundance, spatial structure, and diversity in assessing the Lower Snake River major population group of Snake River (SR) spring/summer Chinook—the same inquiry applied for the other major population groups and species in this BiOp).

existence of”). Thus, the RPA does not cause “some deterioration in the species’ pre-action condition.” *Nat’l Wildlife Fed’n v. NMFS*, 524 F.3d 917, 930 (9th Cir. 2008). And the RPA does not create “some new risk of harm” that would jeopardize a listed species. *Id.* Rather, NMFS’s analysis ensures that, considering all aggregate factors affecting the species, the RPA will improve the species’ status and move them toward recovery. *See* 2008 BiOp at 8.2-26–8.2-29 (explaining “the status of the [SR fall Chinook species] as a whole is expected to improve compared to its current condition and to *move closer to a recovered condition*”) (emphasis added); *id.* at 8.3-39–8.3-42 (explaining that “the survival changes resulting from the [RPA] and other continuing actions ... will ensure a level of improvement that results in the [species] being on a trend toward recovery”). NMFS’s “interpretation ‘sensibly conforms to the purpose and wording of the regulations’” and Ninth Circuit law, and it should be upheld. *Martin v. Occupational Safety & Health Review Comm’n*, 499 U.S. 144, 151 (1991).

Notably, Plaintiffs do not dispute these facts. Instead, they mistakenly contend NMFS’s inquiry is unlawful because past actions (*e.g.*, 1999 FCRPS operations) jeopardized listed species and, thus, this RPA does not do “enough” to compensate for past harms. NWF Reply at 8. This is the wrong inquiry. The agency “action” subject to Section 7(a)(2) is the RPA, and the agencies’ obligation is to ensure that the RPA does not “reduce appreciably” the species’ likelihood of survival and recovery. 50 C.F.R. § 402.02. Section 7(a)(2) does not, as Plaintiffs argue, require agencies to “boost the [species’] chances of recovery.” *Salmon Spawning & Recovery Alliance v. NMFS*, 342 F. App’x. 336, 338 (9th Cir. 2009). To the contrary, actions that “remove[] a species from jeopardy entirely, or that lessen[] the degree of jeopardy”—as this RPA does—are not prohibited. *NWF v. NMFS*, 524 F.3d at 930. Thus, Plaintiffs’ belief that NMFS’s approach is unlawful because it does not result in “enough” improvements is contrary to the law.

Plaintiffs’ continued efforts to equate their interpretation of NMFS’s 2000 BiOp with the inquiry mandated by the ESA fall short for similar reasons. NWF Reply at 3-4. While Plaintiffs disagree that NMFS may properly examine whether the agency action provides the species with an “adequate potential for recovery,” *id.* at 3, they urge adoption of the 2000 BiOp’s framework

that performed precisely that inquiry, *see* NOAA B274:1-8 (2000 BiOp); 2008 BiOp at 1-10. This is fatal to Plaintiffs’ arguments. The 2000 and 2008 BiOps employed different methods to address the *same questions*, and Plaintiffs cannot explain why one method is required by the ESA, whereas every alternative method is unlawful. *Oceana Inc. v. Pritzker*, -- F.Supp.3d --, 2014 WL 7174875, at *11 (D.D.C. Dec. 17, 2014) (“The statute does not define how the [jeopardy] concept is to be measured, and the agency therefore has discretion to make this determination on the basis of its own expertise.”).

In any event, Plaintiffs cannot rationalize away the fact that the Court rejected the 2000 BiOp methods they now defend. In 2000, NMFS evaluated whether the RPA, “*combined with other ongoing and anticipated measures ... outlined in the Basinwide Recovery Strategy, are likely to ensure a high likelihood of survival with a moderate-to-high likelihood of recovery.*” NOAA B275:24552; 2008 Toole Reply Decl. ¶¶ 22-26 (ECF 1649). The Court, however, rejected NMFS’s reliance on future, uncertain recovery actions. *NWF v. NMFS*, 254 F.Supp.2d 1196, 1213-15 (D. Or. 2003). And, despite urging a return to 2000, even Plaintiffs continue to assert that the 2000 BiOp “improperly relied” on future recovery actions. NWF Reply at 3 n.2. Thus, NMFS rationally did not return to this analysis in 2008. 2008 NOAA C1155:3.⁴

In short, Plaintiffs’ challenge is marked by a continued refusal to address NMFS’s ESA analysis, its interpretation of its own regulations, and Ninth Circuit law. The latter point is particularly instructive. This Circuit has been clear that the ESA does not require agencies to

⁴ Plaintiffs also cannot sustain their argument that their preferred inquiry is required because of NMFS’s survival analysis. NWF Reply at 6. NMFS’s survival analysis identified the biological attributes relevant to analyzing the species’ likelihood of survival (population levels above quasi-extinction levels) and points of risk (more than 5% probability of short-term extinction risk), and it evaluated whether the RPA is expected to reduce limiting factors and threats in the context of these attributes and points of risk. 2008 BiOp at 7-14–7-20, 7-34–7-35. NMFS performed the same inquiry in analyzing the RPA’s effects on recovery. *Id.* at 7-22–7-28, 7-35–7-37 (identifying biological factors informing long-term recovery (VSP factors) and points of risk (productivity below 1.0) and evaluating whether the RPA is expected to reduce limiting factors and threats in the context of these attributes and points of risk). The only difference between the survival and recovery analysis is the metrics and factors relevant to each inquiry. Rather than identify an error, Plaintiffs simply reinforce that NMFS did, in fact, perform a full recovery analysis in this consultation. *Rock Creek Alliance v. FWS*, 663 F.3d 439, 443 (9th Cir. 2011).

improve a species' survival and recovery. What the ESA requires is "some attention to recovery issues," so that there is "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." *NWF v. NMFS*, 524 F.3d at 936. This BiOp exceeds that assurance.

2. *NMFS's Jeopardy Analysis Is Reasoned, Supported, And Entitled To Deference.*

Once their attempt to rewrite the statute and regulations is stripped away, it becomes clear that Plaintiffs' argument is that the Court should weigh the science and the *post-hoc* litigation declarations⁵ and, ultimately, adopt Plaintiffs' notions on how to perform a technical and scientific analysis. Missing in this challenge is any record-based evidence that NMFS acted "arbitrarily" or "capriciously," *i.e.*, without reason or the application of its expertise to facts and data. 5 U.S.C. § 706(2)(A). NMFS's scientific analysis is sound, and Plaintiffs' efforts to substitute their views for those of the agency must fail. *Trout Unlimited v. Lohn*, 559 F.3d 946, 959 (9th Cir. 2009) ("NMFS is entitled to decide between conflicting scientific evidence.").

Plaintiffs' primary critique is the refrain that NMFS only considers whether there will be some "detectable" growth (*i.e.*, one more fish in each generation), rather than what is required to improve the species' *recovery* prospects. NWF Reply at 4-5 & n.4. While their simplistic "one more fish" soundbite describes a simple, forward-looking abundance trend, it does not describe what NMFS did. NMFS's quantitative recovery analysis went beyond this, evaluating average productivity metrics and a suite of qualitative factors used in viability (recovery) assessments. *See* 2008 BiOp at 7-20–7-29, 7-35–7-37; 2014 BiOp at 47-50, 54-64. These two analyses are very different; for example, changing *average* productivity metrics (derived from decades of empirical data) from below to greater than 1.0 (NMFS's goal for each indicator metric) requires

⁵ Plaintiffs' reply declarations confirm their tactic in this case—to overturn the BiOp not on the basis of clear error in the record, but on their declarants' competing views on how to perform an ESA analysis (Kostow Decl. (ECF 2021)) and analyze equivocal scientific data (*see* Connors Reply Decl. (ECF 2017); Olney Reply Decl. (ECF 2018)). As we argued (ECF 1989) and the Court concluded (ECF 1995), considering the declarations for that purpose is improper. *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 991-93 (9th Cir. 2014).

far more improvement than simply ensuring one more fish returns.⁶ Plaintiffs' caricature of NMFS's analysis does not undermine the 2008 and 2014 BiOp determinations.

Plaintiffs' remaining technical disputes largely center on how NMFS analyzed the empirical data for the Interior Columbia River species. NWF Reply at 9-12. As we previously explained, NMFS's 2008 quantitative analysis examined the empirical data to identify the "base period" status (1980 to 2000 brood years). NMFS then identified the proportional change in survival expected from "current" (through 2007) and "prospective" (2008 to 2018) actions. Fed. Br. at 15-16; Toole Decl. ¶ 10 (ECF 2002).⁷ In 2014, NMFS analyzed the new empirical data (extended base period data) to determine whether the species' status had changed because, if there was no change, the 2008 BiOp's survival estimates would remain sound. 2014 BiOp at 45, 462. Following a detailed analysis of new empirical data, NMFS found strong evidence that lower R/S in some high-abundance years was consistent with expectations of density-dependent interactions and not, as Plaintiffs argue, of an unexpected reduction in the productivity of the salmonid populations. Toole Decl. ¶¶ 11-16.

Neither Plaintiffs nor their declarants dispute NMFS's density-dependent analysis. See Connors Reply Decl. ¶ 3 (purpose of the declaration is "not to dispute [NMFS's] conclusions or findings"); Toole Reply Decl. ¶¶ 3-8. Instead, Plaintiffs mix and match different concepts in an attempt to obscure NMFS's analysis; for instance, asserting that 10-year average abundances means there is a "pattern of *low average abundance* and declining productivity." NWF Reply at 11 (emphasis added); *id.* at 10 (citing and characterizing a 10-year average abundance of 16 fish

⁶ To illustrate, a 100-fish population that always returned with one less fish during a 20-year period would have an average recruits-per-spawner (R/S) productivity estimate of 0.990. If one more fish returned over the next eight brood years, which is consistent with the number of new observations in the 2014 BiOp, the 28-year average R/S estimate would be less than 1.0 (0.996).

⁷ Plaintiffs recast arguments previously raised against NMFS's 2008 quantitative analysis, but offer nothing new. For example, NWF still refuses to confront NMFS's qualitative analysis, opting instead to call it a "black box." NWF Reply at 9. These arguments fail. NMFS rationally explained and clearly set forth its analysis, reasoning, and findings. See, e.g., 2008 BiOp at 8.3-28–8.3-29 (at lower population levels, explaining that most quantitative productivity metrics were above 1.0 (replacement rate), there is uncertainty in the metrics, and analyzing qualitative factors that corroborated the quantitative metrics); *id.* at 8.3-40–8.3-46 (summarizing quantitative and qualitative analysis, and NMFS's conclusions, at the species' level).

for the Yankee Fork population). But it was the new years of “historic returns” Plaintiffs reluctantly admit occurred, NWF Reply at 11, that led to increased density-dependent interactions and lower productivity estimates in the new years of data, *see* 2014 BiOp at 114 & Figure 2.1-25 (“Those four years [in the new data] ha[d] high abundance and low productivity, driving down the extended Base Period average R/S estimates”); NOAA C34270 (Yankee Fork) (extended base period data show up to 160 natural spawners—high abundances for a population spawning and rearing in degraded, low-capacity tributary habitats, *see* 2014 BiOp at 295-96).

In another attempt to obscure, Plaintiffs rely on Dr. Connors’ theory (that populations are passing suitable tributary habitat to spawn in overcrowded areas) to argue that NMFS failed to consider what actions may be needed to improve the existing status of the fish. NWF Reply at 11. These arguments are not disputes with NMFS’s analysis of the new empirical data. Toole Decl. ¶ 8 (explaining that these arguments relate to the efficacy of habitat restoration, not NMFS’s analysis of the empirical data). And Plaintiffs’ claim that Dr. Connors’ theory shows that NMFS failed to consider factors limiting the species’ abundance and productivity has no merit. This *entire* ESA consultation consisted of NMFS’s analysis of factors limiting survival throughout the freshwater and estuarine portions of the species’ life cycles, and NMFS adopted numerous RPA actions that address those limiting factors and threats. *See* NOAA B281:27401-98 (RPA Table); *see also, e.g.*, 2008 BiOp at 8.3-54–8.3-55.⁸

On reply, Plaintiffs raise a new argument asserting that, if one accepts NMFS’s findings that the base period status has not changed, then the 2008 BiOp survival improvement predictions are not occurring and the RPA is not working. NWF Reply at 10; OR Reply at 11-12,

⁸ Dr. Connors’ theory does not undermine any other aspect of NMFS’s analysis, such as its analysis of the RPA habitat actions. Dr. Connors identifies a theory that even he does not assert “is, in fact, occurring.” Connors Reply Decl. ¶ 9. Moreover, as Dr. Zabel explains, Dr. Connors’ “hypothesis lacks empirical support.” Zabel Reply Decl. ¶¶ 3-6; *see also* Toole Reply Decl. ¶¶ 9-16 (explaining why Dr. Connors’ other arguments do not call into question NMFS’s analysis). The ESA requires NMFS to consider the best available scientific data, and Dr. Connors’ theory does not meet that standard. *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 621 (9th Cir. 2014) (“That appellees were able to produce post-hoc theories alluding to the possibility of bias from such a comparison does not invalidate the [agency’s] choices”).

32. Plaintiffs mischaracterize NMFS's analysis in three important respects.

First, NMFS's 2008 analysis did not assume that the survival changes associated with the "current" actions would be immediately reflected within the life-cycle productivity metrics. 2008 BiOp at 7-12; 2014 BiOp at 53 (2008 analysis assumed that all "current" survival changes would occur in a single time-step; further explaining that *actual* survival changes would accrue after the actions are fully implemented and the changes expressed over the species' entire life-cycle); *id.* at 183 (same). NMFS also explained why, even for actions with immediate survival benefits, improvements would not necessarily be detectable within the average life-cycle metrics. *Id.* at 68 ("[A] sufficient number of new observations must accumulate to change the indicator metrics, which are calculated from all observations, including 20 or more Base Period observations").

Second, the new empirical data used to evaluate the base and extended base period productivity metrics covered the 2005 to 2007 salmonid brood years. 2014 BiOp at 77-78. Implementation of RPA actions, by contrast, began in 2008. Thus, life-cycle survival changes associated with the RPA are not reflected in the new empirical data. *Id.* at 68-69. Obviously, empirical data predating RPA implementation does not address the efficacy of the RPA. *Id.*

Third, NMFS examined the actual evidence on whether the life-stage (as opposed to life-cycle) survival changes it predicted to occur from "current" actions are, in fact, occurring. 2014 BiOp at 68. For example, NMFS predicted a 20% survival improvement associated with current hydrosystem actions for SR spring/summer Chinook populations. 2008 BiOp at 8.3-9-8.3-10, 8.3-52. While Oregon implies that these effects have not occurred, OR Reply at 11, 32, the recent juvenile survival data demonstrate otherwise, 2014 BiOp at 364 (Figure 3.3-2) (showing improvement in juvenile survival above the 2008 BiOp's "current" prediction and, in many cases, above those levels predicted following full RPA implementation). NMFS similarly analyzed data for all of the other "current" actions. 2014 BiOp at 183-220. Thus, NMFS did not ignore whether the actions analyzed in the 2008 BiOp were having their intended effects.

In the end, Plaintiffs fabricate a battle of the experts over highly technical and complex scientific models and approaches. Even then, Plaintiffs' declarants often misunderstand the

record and NMFS's analysis. The Court's task is not to decide among competing experts, but to examine whether the record supports NMFS's expert choices and analysis. The record here more than supports NMFS's analysis.

B. NMFS Rationally Interpreted And Applied The ESA's Adverse Modification Mandate.

Plaintiffs continue their attack on NMFS's adverse modification analysis, taking aim at both the statutory standard and how NMFS applied that standard. These claims, however, are premised more on Plaintiffs' philosophical disagreements with the FCRPS, and less on the law or how the RPA actually works to maintain or improve critical habitat. The record demonstrates that NMFS fully complied with the law, and its adverse modification analysis should be upheld.

1. NMFS's Adverse Modification Inquiry Complies With The Law.

Plaintiffs' latest attack on NMFS's adverse modification inquiry is based on a new theory—that there are two separate legal standards governing the “destruction or adverse modification of” critical habitat. According to Plaintiffs, where the base condition of critical habitat is “functional” (a term they do not define), an agency action may degrade and eliminate parcels of critical habitat, so long as the action does not “appreciably diminish” the conservation value of the critical habitat. NWF Reply at 36. But where critical habitat is not presently functional, agencies must affirmatively restore critical habitat. *Id.* at 36, 40. While inventive, these distinctions are not contained in Section 7(a)(2), NMFS's regulations, or Ninth Circuit law.

“It is well established that ‘when the statute’s language is plain, the sole function of the courts—at least where the disposition required by the text is not absurd—is to enforce it according to its terms.’” *Lamie v. U.S. Trustee*, 540 U.S. 526, 534 (2004). Here, Section 7(a)(2) is unambiguous in two critical respects. First, Congress was explicit that the statutory inquiry centers on “how the agency action affects ... critical habitat.” 16 U.S.C. § 1536(b)(3)(A); *Gifford Pinchot*, 378 F.3d at 1075 (“[T]he plain language of the ESA requires that the adverse modification inquiry examine *a given project’s* effect on critical habitat.”) (emphasis added). Second, Congress made clear what is prohibited—those actions that “*result* in the destruction or

adverse modification of” critical habitat. 16 U.S.C. § 1536(a)(2) (emphasis added). Like the jeopardy prohibition, the adverse modification standard prohibits only those actions that “cause the deterioration of the critical habitat’s pre-action condition.” Proposed Rule, 79 Fed. Reg. 27060, 27063 (May 12, 2014); *NWF v. NMFS*, 524 F.3d at 936 (agencies must ensure the “action in question will not appreciably reduce the odds of success for future recovery planning, by tipping a listed species too far into danger”).

Viewed under the proper standards, Plaintiffs’ arguments quickly unravel. As a threshold matter, neither the ESA nor any case law contain Plaintiffs’ proffered distinctions. *See* NWF Reply at 36-38 (contending that various cases are consistent with their views, rather than pointing to any actual holdings). Indeed, the case law refutes Plaintiffs’ arguments. In *Butte Environmental Council v. U.S. Army Corps of Engineers*, 620 F.3d 936 (9th Cir. 2010), for instance, the Court upheld the agency’s critical habitat determination, despite the action’s contribution to a “range-wide trend in habitat loss” and “fragmentation” of existing critical habitat, because the action did not rise to the level of appreciably diminishing the conservation value of the habitat. *Id.* at 944, 948. Whether the habitat was functional to begin with simply was not relevant to the Court’s analysis. *Id.*⁹

Plaintiffs’ specific arguments—that the relevant issue is how baseline actions (1999 operations, the dams) have affected critical habitat—misconstrue the law. NWF Reply at 38; OR Reply at 25-26, 29 & n.21. The regulatory focus is on the “effects of the action,” which does not include independent baseline harms. *NWF v. NMFS*, 524 F.3d at 930 (ESA “does not require NMFS to include the entire environmental baseline in the ‘agency action’ subject to review”); 50

⁹ The other cases Plaintiffs rely on fail to support their claims. In *Rock Creek Alliance*, 663 F.3d 439, the action degraded critical habitat and reduced the functionality of the habitat. *Id.* at 443. That action complied with the ESA for one reason—FWS “adequately considered the impact that the [action] could have on the habitat’s value for bull trout recovery.” *Id.*; *Nw. Env’tl. Defense Ctr. v. NMFS*, 647 F.Supp.2d 1221, 1234-36 (D. Or. 2009) (same). In *Locke*, NMFS’s findings centered on the fact that critical habitat “will continue to be degraded by [the Project].” 776 F.3d at 1008. Likewise, in *Nez Perce Tribe v. NOAA Fisheries*, 07-cv-247-BLW, 2008 WL 938430 (D. Idaho Apr. 7, 2008), critical habitat was “being destroyed by the current [project] operation.” *Id.* at *8. Both *Locke* and *Nez Perce* concerned the effects of the agency action at issue on critical habitat and not, as Plaintiffs argue, on whether habitat was functional. NWF Reply at 36-40.

C.F.R. § 402.02 (“effects of the action” are those effects “added to [not part of] the environmental baseline”). While NMFS must “consider the effects of its actions *within the context of* other existing human activities,” *NWF v. NMFS*, 524 F.3d at 930 (emphasis added), the inquiry remains tethered to “how the action affects ... critical habitat,” 16 U.S.C. § 1536(b)(3)(A). And the statutory obligation is a prohibition, not a mandate to improve or recover designated critical habitat. *Butte Envtl. Council*, 620 F.3d at 947 (adverse modification mandate prohibits an action that “appreciably diminishes,” not improves, “the value of critical habitat”).

Similarly, Plaintiffs apply an incorrect Section 7(a)(2) standard in arguing that the safe passage PCE, a functional component of critical habitat essential to the conservation of the species, must allow for in-river survival at a rate that leads to recovery. *NWF Reply* at 40; *OR Reply* at 26, 29. As before, NMFS is not required to ensure that PCEs are functioning at a level adequate for recovery. Nor must NMFS define “in-river survival” levels in order to evaluate how an action affects the recovery value of critical habitat. *See Fed. Br.* at 53 n.43. “Neither the ESA nor its implementing regulations ... require that the FWS calculate a rate of loss” of critical habitat, much less a survival rate needed for recovery. *Butte Envtl. Council*, 620 F.3d at 948. Rather, the statute and regulations “require only that the FWS evaluate ‘the current status of the listed species or critical habitat,’ ‘the effects of the action,’ and the ‘cumulative effects on the listed species or critical habitat.’” *Id.* at 948 (quoting 50 C.F.R. § 402.14(g)(2)-(3)). There is no claim here that NMFS failed to consider these factors, and the Court should reject Plaintiffs’ efforts to graft additional requirements into NMFS’s adverse modification inquiry. *See Lands Council v. McNair*, 537 F.3d 981, 991 (9th Cir. 2008) (*en banc*) (overturning precedent that “created a requirement not found in any relevant statute or regulation”).

Rather than Plaintiffs’ conjured standards, the legally relevant issue is whether NMFS’s analysis considered how the RPA affects the conservation (recovery) value of critical habitat. *Butte Envtl. Council*, 620 F.3d at 947; *Gifford Pinchot*, 378 F.3d at 1069-70. NMFS’s inquiry does exactly that. *Fed. Br.* at 50-51. It focuses on evaluating the conservation function of PCEs, because those are the habitat elements essential to the recovery value of the critical habitat. 2008

NOAA B:333; 2008 NOAA C1155:16 (Response 4-A). Where, for instance, the function of a PCE is maintained (or improved), the action is not degrading the *conservation value* of the habitat. By focusing its inquiry in this way, NMFS ensured that the conservation function of PCEs will not be degraded, and will either be maintained or restored to a level sufficient to avoid such degradation. 2008 BiOp at 1-13 (RPA must “both reduce or offset the adverse effects associated with the proposed action to ... maintain (or restore) essential habitat features so as to not be likely to result in the adverse modification of designated critical habitat.”).¹⁰ This is the correct legal inquiry, and NMFS’s analysis should be upheld. *See W. Watersheds Project v. FWS*, 13-cv-176-BLW, 2014 WL 4853200, at *8 (D. Idaho Sept. 29, 2014) (“[FWS] concluded that strong areas would continue to improve and degraded areas would not degrade further ... When the FWS uses its expertise in situations like this—where many factors point in different directions—the case law ... requires this Court to give deference to the agency.”).

2. *NMFS’s Adverse Modification Analysis Considers Relevant Factors And Relies On The Best Available Scientific Evidence.*

The record here refutes Plaintiffs’ factual complaints with NMFS’s critical habitat analysis. Plaintiffs continue to focus on how the RPA affects the safe-passage PCE and assert that this PCE is not functioning. Plaintiffs then offer conclusory statements that there is “no evidence” showing that the RPA is improving the safe-passage PCE. As shown below, the safe-passage PCE is functioning, and the evidence amply supports NMFS’s findings that the RPA is improving the conservation function of this PCE.

First, NMFS never found, and there is no evidence suggesting, that the safe passage PCE is not functioning. These listed salmonids are surviving their freshwater migration through the mainstem corridor and doing so at rates supporting increasing abundance trends. 2014 BiOp at 79-83; Graves Reply Decl. ¶ 11 & Ex. 1. While NMFS explained that the critical habitat “as a

¹⁰ Oregon’s contention that NMFS’s analysis “masks” localized impact is unfounded. OR Reply at 28 (citing no examples to substantiate this claim). NMFS analyzed all critical habitat designated for the species and, in doing so, examined individual PCEs and site-specific effects. *See, e.g.*, 2008 BiOp at 7-37–7-51 (explaining NMFS’s life-stage and action-specific analyses).

whole does not yet fully support the conservation value of designated critical habitat,” 2014 BiOp at 477, that is not equivalent to a finding that one PCE is not functional. 2008 BiOp at 3-6 (discussing functions provided by freshwater migration corridors, many of which are being provided for under current habitat conditions); 2014 BiOp at 388 (NMFS explaining that the mainstem corridor habitat is improving). Plaintiffs identify no contrary evidence.

Second, Plaintiffs’ assertions that “no evidence” shows this RPA is improving the conservation function of the safe passage PCE are false. OR Reply at 30-31. Since this RPA has been in effect, the evidence demonstrates that:

- dam passage survival estimates have improved, 2014 BiOp at 358-60; Corps 20692:318167; Graves Reply Decl. ¶¶ 20-22;
- reach survival estimates (migration through the mainstem dams) have improved, *see* 2014 BiOp at 364-366; Corps 20692:318169; NOAA B263:22216 (Muir & Williams 2012); Graves Reply Decl. ¶¶ 10, 15;
- juvenile travel times through the system have improved, *see* NOAA B47:3293, 3296; Corps 20692:318168,¹¹ and
- hundreds of specific actions implemented under the RPA are improving salmonid survival and the conservation function of the safe-passage PCE, *see, e.g.*, Corps 20692:318161 (showing construction of The Dalles spillwall increasing survival); 2014 BiOp at 345-46; NOAA B46; NOAA B47.

Oregon’s arguments and its declarant’s analysis (presented for the first time in litigation) cannot conceal these facts. For example, Oregon’s only response to SR fall Chinook’s improved survival under this RPA is that a figure in the 2014 BiOp (2014 BiOp at 366; Graves Decl., Fig. 4 (ECF 2005)) is “somewhat misleading,” because late-season survival rates were not reported for the recent years. OR Reply at 30. The absence of estimates for late-season migrants is not a product of omitting data points in a graph. It is because these late season migrants are, under this

¹¹ Oregon posits that “[i]t is possible that travel time has been reduced,” but then hedges by crediting spill and flow for any “possible” reductions. OR Reply at 31. But fish travel time improvements are not theoretical. Graves Reply Decl. ¶¶ 12-14 & Fig. 1 (addressing Oregon’s claims and incorrect focus on water (not fish) travel time); *see also* NOAA C4011:72845 (comparing steelhead travel time and survival across similar low flow years); 2008 NOAA B422:2 (study of surface passage structures, showing benefits of structures); NOAA B47:3297; NOAA B46:3199. And the RPA itself includes spill and flow operations, NOAA B281:27432-37; 2014 BiOp at 37-39; ECF 1837-1; Corps 20692:318163, belying Oregon’s attempts to credit improvements to critical habitat to factors wholly outside the RPA.

RPA, migrating earlier (as they did historically) and surviving at higher rates. Graves Reply Decl. ¶¶ 10-11. Likewise, Oregon asserts (without any analysis) that decreasing spill by any amount “de facto” decreases survival, OR Reply at 31, claiming simply that spill is “good.” Graves Reply Decl. ¶ 18. But Oregon refuses to address NMFS’s analysis, and for good reason—NMFS’s expert analysis is scientifically and technically sound. Fed. Br. at 29, 53; Graves Reply Decl. ¶¶ 16-19 (refuting Oregon’s assertions relating to spill).¹²

Unlike Oregon, NMFS took the time to produce and vet among the regional sovereigns a rigorous, expert analysis of the RPA’s effects on listed salmonids. NMFS’s analysis shows that the RPA is improving in-river survival and the conservation function of the safe passage PCE. This analysis is supported by the evidence, and it is technically sound. As such, NMFS’s findings that this RPA is improving the conservation function of the safe-passage PCE should be upheld.

II. NMFS RATIONALLY ADOPTED THE REASONABLE AND PRUDENT ALTERNATIVE AND CONSIDERED ALL RELEVANT FACTORS.

Plaintiffs also continue to challenge various specific RPA actions, including habitat, bird predation, and kelt re-conditioning programs. NWF Reply at 12-36. Review of the RPA in this case is governed by several statutory provisions. A proper RPA is one that NMFS “believes would not violate subsection (a)(2) ... and can be taken by the Federal agency.” 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.02; *Locke*, 776 F.3d at 1002; Fed. Br. at 31-32. NMFS must make this determination based on the “best scientific data available.” *Jewell*, 747 F.3d at 602 (“The determination of what constitutes the ‘best scientific data available’ belongs to the agency’s ‘special expertise.’”). In meeting these standards, and managing any risk to the listed species or critical habitat, NMFS’s discretionary implementation of Section 7(a)(2) is informed by the institutionalized caution intended by the ESA drafters.¹³ Finally, NMFS must “consider[]

¹² Oregon argues that its position on providing higher spill is defensible because scientists use correlative evidence. OR Reply at 31. NMFS, the Independent Scientific Advisory Board (ISAB), the Corps, and University scientists disagree, and they identified numerous problems with Oregon’s analysis *in addition to* its use of correlative evidence. *See* 2014 BiOp at 381-82; Corps 3669 (ISAB); Corps 3135 (Corps); NOAA B383. Oregon offers no response.

¹³ In its consultations for the FCRPS, NMFS has been careful to take a precautionary approach in developing, evaluating, and implementing the RPA by, for example: applying a conservative

the relevant factors and articulate[] a rational connection between the facts found and the choices made.” *Nw. Ecosystem Alliance v. FWS*, 475 F.3d 1136, 1140 (9th Cir. 2007).

Three times in the past five years, the Ninth Circuit has firmly rejected attempts to affix new obligations on agency decision-making under the APA and relevant statutes. In *Lands Council*, the plaintiffs challenged the use of data that had not been verified on the ground, *see* 537 F.3d at 990, arguing that reliance on the data was arbitrary because it did not meet the standard for reliability, *id.* at 987, 990. The Ninth Circuit rejected these arguments and, in doing so, reversed prior cases that had imposed heightened requirements on agency decision-making. *Id.* at 991-94 (deferring to the agency and concluding that it was improper to have required ground-truthed data, rather than reasonable projections). Similarly, in *Locke and Jewell*, the Ninth Circuit emphasized that the statute and regulations define a valid RPA and rejected arguments that would have required the agency to apply discretionary guidelines or imposed other requirements. *Jewell*, 747 F.3d at 624, 635-38; *Locke*, 776 F.3d at 1002.

In light of this precedent, Plaintiffs’ “standards” for an RPA reflect their view of what the law *should be*, not what the law *is*. For example, Plaintiffs argue the agencies must be able to “detect” how much tributary actions improve life-cycle survival before including a habitat mitigation program in an RPA, NWF Reply at 17, 20, or ensure that a proposed RPA will be “100% successful,” NWF Reply at 23, rather than determine whether it is *likely* to avoid jeopardy and adverse modification. Plaintiffs also contend that, regardless of how uncertain the data or whether NMFS has concluded that a study constitutes the best available science about risks to a species, any study that, even anecdotally, identifies a risk to a species must be included in the analysis because of the “precautionary intent of the ESA.” NWF Reply at 26 n.22.¹⁴ These

methodology for determining that the RPA avoids jeopardy and adverse modification of critical habitat, NOAA B281:26684-86; 2008 NOAA B344; including a robust research and monitoring program as an essential part of the RPA, NOAA B281:26729, 27468-98; and adopting the Adaptive Management Implementation Plan (AMIP) in 2010 to explicitly take a more precautionary approach for the listed species. NOAA B286:30324.

¹⁴ Plaintiffs now concede that the legislative history concept of “giv[ing] the benefit of the doubt” to the species is “embedded in the ESA itself” and, thus, does not represent a separate “standard.” NWF Reply at 12, n.11. *See* Fed. Br. at 33.

standards do not reflect the law. *Jewell*, 747 F.3d at 602; *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988) (complying with ESA mandates, such as the best available science mandate, satisfies Congress’s intent to give the benefit of the doubt to the species).

Remarkably, in restating their views on the standard for an RPA, Plaintiffs ignore *Lands Council*, *Jewell*, and *Locke*, and argue that *Center for Biological Diversity v. BLM*, 698 F.3d 1101 (9th Cir. 2012), merely noted that unenforceable actions outside the BiOp cannot be relied on. NWF Reply at 13. That is not what that court said; rather, the Ninth Circuit explained that, to be “enforceable,” conservation measures must be integrated into the proposed action. *CBD v. BLM*, 698 F.3d at 1113-14. When part of the proposed action, “the ESA’s sequential, interlocking procedural provisions ensure recourse if the parties do not honor or enforce the agreement, and so ensure the protection of listed species.” *Id.* at 1115. The standard is clear. The question is not whether the habitat program’s predicted survival benefits and those of other RPA actions are “100 percent certain,” or any of Plaintiffs’ other heightened burdens. Instead, the question is whether NMFS rationally considered the effects of conservation measures that are “enforceable” because they are part of the proposed action. *Id.* at 1117. That is, incorporation into the BiOp provides the certainty required, and recourse if they are not properly performed. *Id.*

NMFS’s BiOp is well supported and plainly sufficient when viewed under the ESA’s actual standards. It relies on the best available science regarding the benefits of the habitat, predation, and kelt programs—which the BiOp expressly incorporates and which the agencies are actively implementing. NMFS’s reliance on those programs does not rest on “sweeping assertions of agency expertise,” as NWF suggests. NWF Reply at 12-13. Rather, as demonstrated through our briefing, the record, and the declarations of NMFS’s experts, the BiOp relies on careful weighing of the science available. An agency decision based on consideration of the science and the relevant statutory factors—even if not all the science is clear and the scientific experts sometimes disagree—is entitled to deference. *See Jewell*, 747 F.3d at 602. This principle applies equally to an agency’s modeling of uncertain causal relationships. *See id.* at 607. Under these principles, the challenged RPA actions easily pass muster.

A. NMFS's Analysis Of The RPA Habitat Actions Is Sound.

There is no dispute that habitat actions are important for improving salmonid survival, by providing safe passage and improving the quantity and quality of spawning and rearing habitat. Anadromous salmonids begin their lifecycle in tributary rivers, streams, and lakes, and then migrate to the estuary, where they continue to grow and transition into fish adapted to ocean conditions. No party argues directly that the agencies should write off these two important life stages. But, through their arguments and incorrect standards, Plaintiffs argue for a degree of certainty of benefits for these programs that no court has imposed (including in this litigation) and that would foreclose implementing a habitat program as part of the RPA.¹⁵

NWF suggests this Court found the predictions underpinning both the tributary and estuary habitat programs unreliable. NWF Reply at 14-16. NWF also reiterates arguments made in its opening brief, selectively quoting reviews of earlier iterations of the tributary program or the Northwest Power and Conservation Council's (Council) Fish and Wildlife Program (FWP). *Compare* NWF Reply at 14-15 & n.13 *with* NWF SJ at 21-22 & 25-26. All of these points either misquote the record or have already been addressed.

As we explained, the ISAB reviewed the Council's FWP, which is a related, but different, undertaking. The FWP broadly identifies mitigation measures for any anadromous fish, resident fish, and wildlife affected by Columbia Basin dams. The FWP includes a broad array of habitat projects including, but not limited to, the tributary actions implemented under the BiOp. BiOp tributary actions undergo BiOp (Expert Panel) review and evaluation, in addition to Council and ISRP review. Thus, the Council's program and FWP review do not specifically incorporate the

¹⁵ Plaintiffs single out habitat, bird predation, and kelt re-conditioning actions to argue that their heightened standards apply, but do not apply these standards to all RPA actions in this case. For instance, as we previously noted, the science does not allow the "detection" of life-cycle improvements associated with different spill operations. Fed Br. at 36 n.31. Plaintiffs do not respond and continue to argue, without evidence, that increasing spill will benefit salmonids and should be included in this RPA. *See, e.g.*, OR Reply at 31. Plaintiffs also argue that no limits exist with respect to considering speculative future effects of climate change. *See, e.g.*, NWF Reply at 26 n.22. These arguments show that Plaintiffs seek to hold certain actions to a higher standard because they disagree with the RPA, not because that is required by law.

HQI performance standards in the BiOp or the scientific framework for evaluating benefits of tributary actions relative to those performance standards. Fed. Br. at 39. The ISAB reviewed the Council's FWP, not the BiOp's tributary habitat program, *see* NOAA B188:16029-31, and there are meaningful differences between these programs, *see* 2014 RTC at 24-26.

We also previously put in context the selective quotations of the 2009 independent scientific review process convened by NMFS, ECF 1806 at 3-6 (describing this review), where reviewers were supportive of the habitat program even as they acknowledged the work yet to be done to continue to improve its scientific basis. *Id.* at 39 & n.33.¹⁶ NWF simply ignores that distinction. NWF Reply at 14 & n.13.

Similarly, contrary to Plaintiffs' characterization, the Court never said that the habitat program should be thrown out. *See* ECF 1699 at 2-3; ECF No. 1682 (asking for the scientific basis that connects improvements in habitat to improvements in survival). Instead, through letters to the parties, the Court informally urged the Action Agencies to commit additional funds to habitat mitigation, monitoring, and evaluation, and to identify projects farther into the future. Likewise, in its 2011 opinion, the Court remanded the BiOp based on its finding that the Action Agencies had not clearly specified future habitat actions and, in so doing, it also identified "significant uncertainty surrounding the reliability of ... [the] habitat methodologies," but did not suggest scrapping the program based on this uncertainty. *NWF v. NMFS*, 839 F.Supp.2d 1117, 1124-26, 1128 (D. Or. 2011) (finding NMFS sufficiently "identified specific habitat mitigation actions for 2010 through 2013," and declining to vacate the BiOp because it "contains positive mitigation measures that provide adequate protection to the listed species through 2013").

Plaintiffs also ask that Federal Defendants prove that each action in their habitat program provides the predicted survival improvements. NWF Reply at 16-18. This is not the ESA's standard for an RPA. NMFS may rely on reasonable modeling, expert judgment, and predictions at the frontiers of science when that is the best available information. *See* Fed. Br. at 36, 44. For

¹⁶ Thus, there *was* an independent review of the tributary program, contrary to NWF's suggestion. *Cf.* NWF Reply at 15 n.14.

the tributary habitat program, the Action Agencies use inputs from the Expert Panel process and an empirically derived model to convert improvements in habitat limiting factors from tributary actions into projected HQIs for individual populations, which correspond to predicted survival improvements.¹⁷ 2014 BiOp at 227-52, 260-61; NOAA B422:45179-45222; Tehan Reply Decl. ¶¶ 22-29. Analogously, in the estuary, the Expert Regional Technical Group (ERTG) models survival benefits using its SBU calculator, an expert-driven product of an ongoing scientific review of estuary restoration data and studies. Krasnow Reply Decl. ¶¶ 9-15.

These models, combined with expert judgment, inform predictions about survival improvements for the habitat program as a whole, as do the ongoing research and monitoring efforts underpinning the program. 2014 BiOp at 232-42. It is true that because of the lifecycle of salmonids, the agencies cannot yet demonstrate statistically significant, long-term survival benefits at the population level. Yet, an elaborate research and monitoring program, called for in the RPA, is in place to validate these benefits and inform program implementation. 2014 BiOp at 238-42; Fed. Br. at 36; *see also* Tehan Reply Decl. ¶¶ 4, 20-21; Tehan Decl. ¶¶ 73-85 (ECF 2006).¹⁸ As with the other “H’s,” science-based projections of survival increases, combined with systematic on-the-ground monitoring and further development of the science, form the basis for the habitat program. *Jewell*, 747 F.3d at 602 (“[W]here the information is not readily available, we cannot insist on perfection.”). NMFS concluded that the expected survival increases were reasonably certain based on a review of the evidence on the effectiveness of the proposed habitat restoration actions, preliminary results from the BiOp’s monitoring program, and the expert

¹⁷ As we noted in our opening brief, NWF improperly uses the term “numerically specific” to characterize the survival improvement predictions and to overstate the precision of the Action Agencies’ and the Expert Panels’ predictions. *Compare* Fed. Br. at 35 n.30 *with* NWF SJ at 29. Rather than targeting numerical precision, which all parties and experts acknowledge is currently impossible, the Expert Panels derive the percentage change in limiting factor function from available data about the habitat actions, the scientific literature, and their own judgment.

¹⁸ Research and monitoring clearly show that it is reasonable to expect survival improvements to salmonids as a result of habitat projects directed at key limiting factors. *See* 2014 BiOp at 232-42, 235-38 (discussing studies that show survival improvements from habitat restoration); *id.* at 238-42 (discussing the preliminary results of the BiOp’s monitoring program showing greater fish abundance post-habitat actions); *see* NOAA B41; *see also id.*:2723-24 (Methow habitat projects substantially improved production capacity during the study period).

modeling used to predict survival increases. NMFS concluded that the benefits of the habitat program were sufficiently certain, and it therefore included these actions as part of the RPA. The law requires no more. *Locke*, 776 F.3d at 1002 (only relevant question is whether NMFS “believes” the RPA avoids jeopardy and justifies its decision).¹⁹

In short, Plaintiffs have not shown that the scientific underpinnings of the habitat program are arbitrary or capricious. Instead, they resort to comparing the RPA habitat program to time travel, suggesting that the agencies, their experts, and regional sovereigns are pursuing a pipe dream by implementing habitat programs grounded in the best available scientific data, regional coordination, and expert workgroups. NWF Reply at 15. But even Plaintiffs retreat from this suggestion, acknowledging the habitat programs benefit fish, NWF Reply at 16, and recent monitoring results showing that habitat programs can improve salmonid survival. Fed. Br. at 34-35; 42-43. Plaintiffs’ suggestion that the agencies and their partners (including Oregon and the Nez Perce Tribe) are working at a fruitless endeavor is wrong and should be rejected.

1. *NMFS’s Consideration Of The Implementation Of The Tributary Program Was Reasonable.*

NMFS’s confidence that the tributary program would be implemented to meet the targets for all populations is reasonable and consistent with its duties to consider all relevant factors under the ESA. Fed. Br. at 37-38. On reply, Plaintiffs narrow their tributary implementation argument to focus on the seven populations for which NMFS determined that supplemental actions, in addition to those reviewed by the Expert Panels, would be sufficient to ensure completion. NWF Reply at 20-21; 2014 BiOp at 280-83; Tehan Decl. ¶ 59; Tehan Reply Decl. ¶¶ 14-16. But, the supplemental actions are as clearly specified as the other tributary actions, and

¹⁹ Indeed, the Ninth Circuit has approved of much smaller and much less sophisticated habitat mitigation RPA actions for biological opinions addressing adverse effects from dams. *See Sw. Ctr. for Biological Diversity v Bureau of Reclamation*, 143 F.3d 515, 518, 523 (9th Cir. 1998) (approving of an RPA where the mitigation program was to purchase a set number of acres, with no effort to monitor whether the mitigation would produce any benefits and no ongoing expert-driven process to drive the mitigation). This case further belies Plaintiffs’ arguments here, where they simultaneously demand more than the law requires and disparage one of the most sophisticated, coordinated, researched, and monitored habitat restoration programs ever included as part of an ESA consultation or RPA.

the agencies have a demonstrated track record of developing new tributary projects when needed (in addition to the concrete strategy for developing new, additional projects going forward). Fed. Br. at 37-38; Tehan Reply Decl. ¶¶ 18-19. Plaintiffs do not respond and continue instead to urge formalistically that the Court find the program lacking for want of a specific contract number assigned to each project. NWF Reply at 20-21. In evaluating an RPA, the ESA does not require any particular methodology, let alone contract numbers. Instead, it requires NMFS to review the available evidence and to decide whether the action will likely avoid jeopardy or adverse modification to the listed species (not to any individual population). Here, NMFS reviewed and discussed these supplemental actions thoroughly with the agencies to ensure that they were implementable and, when implemented, reasonably certain to provide the predicted HQIs and associated survival improvements. *See* 2014 BiOp at 281-83, 286-316; Tehan Decl. ¶¶ 53-55; Tehan Reply Decl. ¶¶ 11-12, 15-16; Fed. Br. at 38; *see also CBD*, 698 F.3d at 1117 (agency properly relied on actions incorporated into the BiOp). As we explained, this action plan is robust and accounts for the technical, social, and economic complexities of implementing a large-scale habitat restoration program.

Adaptive management is not arbitrary—it is good science. And this Court has explained that proper adaptive management means that not all habitat actions need be completely specified and funded at the outset of a ten-year program. *NWF v. NMFS*, 839 F.Supp.2d at 1128 (explaining that a habitat program may be reasonably based on adaptive management and a list of “potential actions”). The BiOp habitat programs are strong in part because the agencies and their expert advisors adjust and update the programs based on new, intervening scientific data or to address logistical challenges or evolving opportunities that accompany a program of this magnitude. For example, a monitoring and evaluation program is in place under the 2008 and 2010 BiOps to evaluate the effects of the tributary habitat program, develop enhanced information on fish-habitat relationships, including life-cycle models, and to inform program implementation. *See, e.g.*, 2014 BiOp at 239-240; NOAA B32. Part of this monitoring effort is the intensively monitored watershed (IMW) program, which is landscape-level monitoring that

gathers data on how a group of actions has affected fish survival or productivity. NOAA B32:2360. As new data from these many IMWs, and from other parts of the monitoring program, show how actions change habitat and fish survival, the Action Agencies will continue to incorporate the information into the program. 2014 BiOp at 253-63.

Plaintiffs' argument is not about the benefits or certainty of the RPA habitat actions, but whether Plaintiffs believe habitat-based actions should be relied on in this BiOp. The choice of a particular RPA strategy is left to NMFS, and this one, based in part on habitat mitigation, is well-grounded in science. Because NMFS rationally determined that the habitat program addresses limiting factors, is reasonably certain to improve the survival of salmonids, and is likely to result in the survival improvements identified in 2008, the Court should uphold NMFS's analysis.

2. *NMFS's Consideration Of The Implementation Of The Estuary Program Was Reasonable.*

Smolts migrating through the FCRPS must all pass through the estuary on their way to the ocean. Thus, the agencies concluded that improving habitat, restoring connectivity, and ensuring sufficient prey are important to improving salmonid survival in the lower Columbia River. Fed. Br. at 40-43. We previously explained the scientific basis for the survival estimates predicted from the estuary actions. *Id.* at 42-43; *see also supra*. These predictions are based on expert judgment, the best available research, and constant refinement by the ERTG, who are estuary biologists and habitat restoration specialists. *Id.* at 40-41.

Plaintiffs characterize this program as arbitrary, suggesting that "the basis for making these predictions is not reliable or even available," and then proceed to selectively quote several outside reviews, addressed *supra*, and ISAB's review of the ERTG scoring process, which Dr. Krasnow has addressed. Krasnow Decl. ¶¶ 19-31 (ECF 2003); Krasnow Reply Decl. ¶¶ 14-15, 24.²⁰ They also continue to demand that the agencies must "show ... that the predicted survival

²⁰ Mr. Olney continues to misrepresent the interaction between the Estuary Module and ERTG's process. Advancements in the estuary experts' understanding of the program have allowed the ERTG's scoring process to move beyond the Estuary Module. *Compare* NWF Reply at 18 n.17 & Olney Reply Decl. ¶¶ 15, 16-19; 20-27; 28-32 *with* Krasnow Reply Decl. ¶¶ 7-8 (discussing feasibility of implementation); *id.* ¶¶ 9-15, 17, 22 (interaction of the BiOp's estuary program and

improvements will occur,” NWF SJ at 22, or be able to “detect” these same benefits before NMFS may rely on them in this consultation. NWF Reply at 17-18. This degree of proof is beyond what the ESA demands. Fed. Br. at 44; *see also Ariz. Cattle Growers’ Ass’n v. Salazar*, 606 F.3d 1160, 1164 (9th Cir. 2010) (“[T]he ESA accepts agency decisions in the face of uncertainty” and “does not require that the [agency] act only when it can justify its decision with absolute confidence”); *Or. Natural Res. Council Fund v. Goodman*, 382 F.Supp.2d 1201, 1205 (D. Or.) (“The court is deferential to an agency’s scientific conclusions, such as whether habitat with certain conditions will support viable populations.”), *aff’d* 110 F. App’x 31 (9th Cir. 2004). In fact, the Ninth Circuit recently approved of an RPA action to develop a plan for floodplain restoration dependent on an expert group’s recommendations, based on predicted benefits. *See Locke*, 776 F.3d at 1007-08. The law therefore does not support Plaintiffs’ claims, and neither do the facts. NMFS here relied on the best *available* evidence to judge the positive effects of the estuary program, and this program is further supported by a robust monitoring program to evaluate the available scientific evidence on the impacts of estuary habitat actions. Fed. Br. at 43 n.38; Krasnow Decl. ¶¶ 21-26. Like the tributary program, this dual approach to evaluating benefits now and including research, monitoring, and evaluation to test the assumptions made is both reasonable and precautionary, and it complies with the law.

Regarding implementation of the program, Plaintiffs note what they term a “discrepancy” between the actual SBUs implemented through 2013 and the Action Agencies’ projections of where they would be by this time. NWF Reply at 18-20. When the Action Agencies were preparing the Comprehensive Evaluation in 2013, they forthrightly acknowledged that the pace of any particular estuary action is unknown, but, over the term of the BiOp, committed to completing projects equivalent to the SBU target. NOAA B48:4338-80. Thus, the Action Agencies averaged the SBUs to be completed over the remaining years in the term of the BiOp.

the Estuary Module); *id.* ¶¶ 18-20 (why the BiOp targets would be met even without the pile dike program); *see also id.* ¶¶ 16, 21, 23-24 (responding to additional points raised by Mr. Olney regarding his mischaracterization of the BiOp and the ERTG’s scoring process).

Krasnow Reply Decl., Ex. 1 at 2-3. Neither the Action Agencies nor NMFS anticipated that the SBUs would be completed in lockstep with that projection. *Id.* And, since the 2008 BiOp, the Action Agencies have increased the pace of project completion based, in part, on their ongoing and growing relationships with their estuary partners. Fed. Br. at 42; Krasnow Reply Decl. ¶¶ 4-6; *id.*:Ex. 1 at 2-3 & nn.5-6. The estuary program is now mature and new projects are continually added to the pipeline of estuary projects, for use if needed.²¹ *Id.* at Ex. 1 at 3-4.

In short, although the agencies acknowledge that significant work lies ahead to complete the program on time, they did not minimize or ignore these concerns. Instead, they evaluated the benefits of the program, the work yet to be completed, and the benefits to all listed salmonids from improving this important component of the salmonids' lifecycle. As NMFS correctly found, the Action Agencies have demonstrated the ability to work effectively with their partners to develop both medium and larger, higher-SBU-value projects. Krasnow Decl. ¶¶ 14-15. Based on the Action Agencies' track record, and the other evidence in this record, NMFS rationally concluded that this program is reasonably certain to meet the BiOp's performance standard targets and, thus, properly part of this RPA.

B. NMFS Properly Concluded That The Tern, Cormorant, And Kelt RPA Actions Are Reasonably Certain To Meet The BiOp Targets.

The BiOp includes RPA actions to reduce terns' and double-crested cormorants' consumption of millions of juvenile salmonids. Bird predation did not respond as anticipated to prior management efforts, so the agencies adapted their plans. Based on a review of past management and currently planned efforts, which are grounded in the best available science, NMFS concluded that the adjusted actions and adaptively managed plans will meet the BiOp targets. Fed. Br. at 45-47.

Tern predation remains an issue even though the Action Agencies successfully reduced

²¹ Indeed, the agencies and their partners have already completed projects that compensate for the SBUs attributed to projects that are no longer being pursued. Krasnow Reply Decl. ¶¶ 7-8. This demonstrates the adaptability of the program; through the process, a continual pipeline of estuary projects is being identified and evaluated, and implemented should the need arise. *Id.*

nesting habitat on East Sand Island to the levels in the 2008 BiOp. 2014 BiOp at 411; 2008 BiOp, RPA Tbl. at 64. The birds' nesting density increased more than anticipated, and they did not disperse as expected, so predation has remained high. 2014 BiOp at 411. In response, tern nesting habitat will be further reduced. Fed. Br. at 46. This is where the benefits of this RPA are realized—the agencies monitored the effects of RPA implementation and adjusted where the effects did not occur as anticipated. Graves Reply Decl. ¶ 28.

NWF nonetheless argues that there is no “evidence” that terns will disperse to habitat hundreds of miles away, despite evidence to the contrary. NWF Reply at 22-23 & n.18.²² For example, the Corps has successfully hazed terns from East Sand Island that dispersed to sites hundreds of miles away.²³ Fed. Br. at 46-47. New tern habitat constructed at Malheur Lake, Oregon, approximately 300 miles from the estuary, successfully attracted some of these Columbia River terns. *See* NOAA C19228:166810, 166806; *see also id.*:166779 (monitoring showing terns at roost sites in British Columbia, California, and Alaska); Corps 434:43981-82. Based on that and other data, NMFS concluded that “[b]and re-sighting data suggest that Caspian terns displaced from their colonies on the Columbia Plateau would eventually relocate to existing or newly-created tern nesting habitat outside the region, even if it is a great distance from the Columbia Plateau.” NOAA C19228:166783. While it may take a year or two for the terns to relocate farther from Columbia River colonies, the data suggest that eventual, farther relocation is not only possible, but likely. *See* Graves Decl. ¶ 51; Graves Reply Decl. ¶ 28. Thus, NMFS's conclusions were reasonably based on the management history and best available science.

NMFS and the Corps also reacted to higher-than-expected cormorant predation by crystallizing the results of past management actions and research into a more aggressive

²² Plaintiffs continue to argue that NMFS should have applied a 50% adjustment to actions to reduce tern predation. NWF Reply at 23 n.19. But NMFS rationally declined to apply a compensatory mortality adjustment because there was no evidence that compensatory mortality was affecting estimates of the impact of tern smolt consumption; thus, there was no scientific basis to apply one. Graves Decl. ¶¶ 58-61; Graves Reply Decl. ¶¶ 24-26; Fed. Br. at 47.

²³ In addition, in the late 1990s, the Corps successfully hazed terns from Rice Island and kept them from nesting there. *See* Fed. Br. at 46-47 (describing successful hazing from Rice Island to East Sand Island).

cormorant management plan, to be implemented starting this year. Fed. Br. at 45-46. Plaintiffs reiterate their skepticism about the RPA action. Their primary critique is based on a 2013 article about Leech Lake, where cormorants were successfully managed by many interconnected actions. NWF Reply at 23. That article, however, does not cast doubt on whether Leech Lake is a successful example of cormorant management. *See* Fed. Br. at 46; Graves Reply Decl. ¶¶ 29-30. NMFS also did not rely solely on Leech Lake to support its cormorant management conclusions. *Id.*; *see, e.g.*, NOAA B363:37755-56 (successful cormorant management in Israel that involved lethal action and other management actions). And the Corps recently adopted a cormorant management plan with aggressive actions to reduce cormorant predation, including culling adult cormorants and egg-oiling, combined with non-lethal measures like nesting habitat reduction. Plaintiffs continue to mischaracterize the Leech Lake example and promote their preferred management of cormorants. Neither of these provides a reason to overturn NMFS's conclusions.

Finally, we previously explained that, while the kelt program is not a panacea, it is a maturing program supported by tribal partners. Based on the expert tribal partners' (including the Nez Perce Tribe's) strong interest in ensuring that the program is a success, the scientific evidence that similar kelt reconditioning programs are beginning to show results, and the demonstrated results of the BiOp's kelt program, NMFS concluded that it was reasonably certain that the kelt program would meet the survival targets. 2014 BiOp at 383-87; Fed Br. at 47-48; Graves Reply Decl. ¶ 39.²⁴ Plaintiffs continue to paint the program in the worst light, and pit the views of Mr. Olney against NMFS's scientists. But, without presenting any new science that NMFS failed to consider, NWF cannot show that this program is arbitrary. And, in any event, NMFS has fully responded to Mr. Olney's misconstruction of the record, belying Plaintiffs'

²⁴ Beyond important factors like the emerging science on kelt reconditioning and the new infrastructure to implement this science, kelt reconditioning provides additional benefits. The Lower River Tribes explain the importance to the Yakama Nation and the Columbia River Intertribal Fish Commission of the kelt actions to return reconditioned fish to the spawning ground. *See* ECF 2007:16 n.8. The Snake River kelt reconditioning program has released dozens of B-run steelhead since 2012, ECF 2007:15, and the Tribes have recently collected more B-run steelhead in the Lochsa and South Fork Clearwater River. *Id.* These interests have created strong partnerships, providing additional indicia that the program can be successful.

continued criticisms of this RPA action. *See* Graves Reply Decl. ¶¶ 31-38. The Court should uphold NMFS’s conclusions as to the kelt management actions.²⁵

C. NMFS Rationally Considered Climate Change Impacts In Its Analysis.

Plaintiffs maintain that NMFS “refus[ed] to consider the new climate science” and failed to develop future climate projections. NWF Reply at 26 & n.22. Contrary to Plaintiffs’ claims, NMFS thoroughly analyzed climate change impacts in the 2008 BiOp, the Adaptive Management Implementation Plan (NOAA B44), the 2010 BiOp, and the 2014 BiOp. NMFS also developed future climate projections, including the pessimistic assumption that ocean climate conditions will be worse than historical conditions, and it qualitatively determined that freshwater climate impacts will generally be less favorable than current conditions. Fed. Br. at 20-21; 2008 BiOp at 7-12-7-13. And NMFS *applied* these projections. NMFS incorporated the ocean scenarios into its quantitative analysis and considered the extent to which the RPA addresses potential freshwater climate change impacts. Fed. Br. at 21-22. Plaintiffs’ climate change arguments therefore are not about whether NMFS considered the issues, but about their belief that future conditions will be even worse than those NMFS analyzed and their opinion that the RPA is inadequate for responding to those changes. These claims fail because Plaintiffs identify no evidence that renders NMFS’s analysis arbitrary or without scientific support.

Plaintiffs first assert that the evidence does not support NMFS’s ocean climate assumptions. NWF Reply at 26-27. Plaintiffs’ “evidence,” however, is generalized statements about long-term climatic conditions; for instance, that in 100 years, ocean conditions may be worse than assumed in the 2008 BiOp. NWF Reply at 26-27 & n.27. What Plaintiffs cannot do is point to evidence demonstrating that it is possible to meaningfully analyze precise future climatic conditions on the scale they urge, given the high uncertainties involved. As the Ninth Circuit explained, NMFS’s analysis need only “be long enough for the [agency] to make a meaningful

²⁵ Plaintiffs suggest that NMFS refuses to address adult survival decreases. NWF Reply at 25 n.21. That data was reasonably and conservatively addressed. Fed. Br. at 48-49. Mr. Graves also responds to Mr. Olney’s new points about adult survival and transportation. *Compare* Olney Reply Decl. ¶¶ 73-76, 78-88 *with* Graves Decl. ¶¶ 39-48.

determination” on the likely effects of the action. *Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 523-24 (9th Cir. 2010). Here, NMFS analyzed pessimistic future climate conditions that may prevail while *the effects of this RPA* are being realized.²⁶ 2008 NOAA S77:33-34. This is a rational choice in the face of uncertainty, and one that complies with the law. *Wild Fish Conservancy*, 628 F.3d at 525 (analysis of future events required only where there is “enough information ... to include a meaningful analysis of [] potential effects”); *cf. WildEarth Guardians v. Jewell*, 738 F.3d 298, 309 (D.C. Cir. 2013) (holding that uncertainty of climate science correspondingly limits the specificity required in an agency’s scientific analysis).

Plaintiffs also continue to interpret a single study as showing when and how climate change will reduce salmonids’ ocean ranges. NWF Reply at 27-28 & n.25. Plaintiffs’ evidence (NOAA B1) does not examine actual salmonid habitats, nor does it purport to identify future “effects” to salmonids. NOAA B1:643-44 (study was not examining actual ranges or range contractions, or analyzing how “species might adapt to changing thermal conditions;” “additional study into the limiting factors on the high-seas behavior and distribution of salmon is necessary to better understand climate impacts on the high-seas ranges of Pacific salmon”). Nor does the study reveal new “effects” not previously considered, NWF Reply at 27-28, because NMFS analyzed these same concerns in 2008. NOAA B282:27635 (“Changing ocean temperatures may alter salmon behavior, distribution, and migrations, increasing the distance to migrations from their home streams to ocean feeding areas”); NOAA B185:15519 (ISAB 2007) (same). Ultimately, Plaintiffs’ arguments reinforce the strength of NMFS’s climate analysis in 2008, where it fully recognized the potential future risks of climate change.

Plaintiffs next turn to NMFS’s analysis of freshwater climate change impacts, asserting

²⁶ As we previously explained, NMFS’s ocean assumptions have proven to be precautionary. Fed. Br. at 20-21. Plaintiffs argue this fact is irrelevant, NWF Reply at 28 n.25, but the relevance is clear—this RPA was developed to address more negative conditions than have actually occurred, to the benefit of salmonids. Related, Plaintiffs cannot show that NMFS limited the scope of its analysis to the 10-year term of the BiOp. NWF Reply at 30 n.27. As Plaintiffs themselves admit, NMFS’s analyzed short-term (24-year) extinction risk, as well as the long-term productivity of populations. *Id.* at 6. *See also* Fed. Br. at 22 n.20; 2014 RTC at 15-17.

that NMFS failed to “balance” post-2018 habitat benefits with these impacts. NWF Reply at 28-30. Plaintiffs are wrong. NMFS expressly analyzed the magnitude and extent of future freshwater conditions, and it applied those findings. For example, in 2008, NMFS concluded that the RPA’s effects (including the effects of the RPA habitat projects) would be reduced because of future freshwater climate change impacts. *See, e.g.*, 2008 BiOp at 8.3-28–29. NMFS also found that a subset of the RPA actions—those that proactively address climate change impacts—are likely to reduce the effects of future climate change. *Id.* And NMFS *balanced* these findings, concluding that the RPA actions are likely to address future freshwater climate impacts to the degree that the 2008 BiOp’s prospective survival estimates are reasonable. *Id.*; *see also id.* at 8.3-41–8.3-42. Thus, there is no “missing” analysis, as Plaintiffs contend.

Finally, Plaintiffs argue that there is no “excess” benefit from the RPA and repeat their view that climate change impacts are additive and must have their own RPA actions. NWF Reply at 31 n.29. But there is ample support for NMFS’s findings that the RPA actions have *both* immediate effects on salmonid survival and long-term effects in addressing future climate change. For example, habitat actions, like those occurring in the Lemhi River, have restored instream flows and “increased spawner and juvenile fish numbers.” NOAA B355:36989; 2014 BiOp at 234; B295:31457. Those same actions address future climate change impacts. 2014 RTC 18; NOAA B185:15535-36; Tehan Decl. ¶ 28. Even the evidence Plaintiffs rely on shows that such “habitat restoration and protection can help mitigate these [future climate] effects and may allow populations to increase in the face of climate change.” 2008 NOAA B18:1, 4. There is nothing unreasonable with NMFS’s findings, and Plaintiffs’ sweeping assertion that an RPA action cannot have immediate benefits and also reduce climate change risks has no merit.²⁷

²⁷ Plaintiffs’ only contrary “example” is the 2013 temperature problems occurring at Lower Granite Dam fish ladder. NWF Reply at 32; NPT Reply at 13. The factors at issue in 2013 were not the efficiency of the Dworshak cool water releases, as Plaintiffs argue, but temperature differentials existing in the fish ladder. *See* Corps 19446; NOAA C33141:277410. These factors are being addressed, Corps 19446; B47:349495; Corps 4535, 4373, and do not show that the Dworshak releases are or will be ineffective in addressing future climate effects. Moreover, it is not any one action, such as Dworshak releases, that address climate change, but the combination of the RPA actions adopted here. *See* 2014 BiOp at 435-42. Plaintiffs do not address these facts.

NMFS’s analysis in the Central Valley Project (CVP) BiOp—which Plaintiffs endorse—is instructive, because it is fundamentally the same as the analysis in the FCRPS BiOps. Fed. Br. at 22 n.21. In the CVP BiOp, NMFS analyzed climate change *qualitatively*, explaining that “uncertainties abound at all levels. We have only the crudest understanding of how salmonid habitats will change and how salmonid populations will respond to those changes, given a certain climate scenario.” 2010 NOAA BB281:173, 189 (further explaining that *other* agencies’ models provide “insights,” not predictors of future climate change effects); *but see* NWF Reply at 30. Moreover, the CVP BiOp’s “climate change” actions Plaintiffs reference (passage to new spawning habitats) would have immediate effects by opening up spawning and rearing habitat, as well as long-term benefits in addressing climate change. 2010 NOAA BB281:659-60; NOAA B253:20707. The same is true for many FCRPS actions. 2014 BiOp at 435-42; NOAA B185:15532 (independent scientists identifying the same principle: actions can be taken now to reduce and respond to future climate change impacts). By relying on NMFS’s CVP BiOp, Plaintiffs undermine their case, because NMFS ultimately performed the same analysis in both ESA consultations. *See* NOAA C33559:281256-57.

In short, the RPA addresses future climate conditions and impacts, and it includes numerous RPA actions that reduce those effects. Plaintiffs’ only response is to argue that “more” is required, while simultaneously disparaging the very actions (the FCRPS,²⁸ hydrosystem operations and configuration actions, habitat restoration programs) that combat these future climate impacts. These inconsistent claims and generalized disagreements with NMFS’s analysis do not satisfy the “high threshold” required to overturn NMFS’s BiOps. *River Runners for*

²⁸ Plaintiffs disagree that the FCRPS itself (a carbon-free source of energy) is vital to regional efforts to address climate change, asserting Federal Defendants present a “false choice” between hydropower and fossil fuels. NWF Reply at 33 n.32. This contention has no merit. As the Northwest Power and Conservation Council (NPCC) has explained, “the region needs to preserve the capability of the hydroelectric system to the greatest extent possible within the limits of fish and wildlife obligations,” because “further reduction in hydroelectric generation will increase carbon emissions, which will also harm fish and wildlife in the long term through accelerated climate change.” *See* NPCC, Sixth Power Plan at 11-19, available at www.nwcouncil.org/media/6284/SixthPowerPlan.pdf (last visited May 5, 2015).

Wilderness v. Martin, 593 F.3d 1064, 1067 (9th Cir. 2010).

D. NMFS's Consideration Of Cumulative Effects And The Environmental Baseline Is Reasonable Under The Applicable ESA Standards.

In its baseline and cumulative effects analysis, NMFS evaluated available empirical data on the status of the salmonids which captures all impacts to the fish, both beneficial and adverse, from federal, state, and private actions, and natural conditions that might affect fish health and the functioning of critical habitat. Fed. Br. at 23-26. Based on this data-driven understanding of the species' status, NMFS developed a current, accurate, and ongoing assessment of the species' health, and the environmental baseline. *See* Final Rule, 51 Fed. Reg. 19,926, 19,932 (June 3, 1986). And, contrary to Plaintiffs' arguments, the agencies squarely considered adverse effects through a life-cycle analysis. As NMFS explained: "Because the analysis proceeds from empirical estimates of average lifecycle survival over an historical period, *it captures all sources and causes of salmon mortality during that period.*" NOAA B422:44379. Because the available empirical data was necessarily several years old, NMFS's baseline analysis relied on adjustments, based on the agency's reasonable projections of current events, to capture the baseline for the consultation. NOAA B282:27571, 28403-502.

Likewise, NMFS has analyzed and updated the FCRPS cumulative effects analysis with each successive BiOp. *See* NOAA B275:24516-23 (2000); B277:25570-83 (2004); Fed. Br. at 24. The 2008 cumulative effects discussion, which underpins the 2014 discussion, for example, included state regulation for pesticides that may enter fish-bearing streams, *see, e.g.*, NOAA B422:44827; *id.*:44868 (discussing limitations to programs for reducing grazing and farming impacts); *see also, e.g.*, 2008 BiOp at 8.2-17 (describing cumulative effects with adverse effects to SR fall Chinook, and explaining that effects are not quantifiable). Indeed, the cumulative effects discussion was framed by identifying limiting factors and threats and discussing cumulative effects that might affect them. *See, e.g.*, NOAA B422:44867.

Through these analyses, NMFS evaluated the species' status, which reflected both positive and negative effects from land use and other activities. Notwithstanding this fact, NWF

argues that, somehow, in gathering empirical data on fish survival, NMFS “considered only positive actions.” NWF Reply at 33. NWF does not explain how NMFS managed to tease out of this life-cycle analysis the impacts of only positive effects rather than simply report the base period condition of the fish. NWF’s argument simply misunderstands the agencies’ analysis.

In addition to this analysis of species’ status, in 2014, NMFS considered whether there were any new, relevant biological opinions since 2008 with new data that would change its 2008 baseline analysis. Concluding that the 2008 analysis remains valid, NMFS based its 2014 ESA determinations on the 2008 BiOp’s environmental baseline. *See* 2014 BiOp at 34, 183-220; 185 (describing large groundwater replacement project). For the 2008 BiOp, NMFS provided the Action Agencies comprehensive information on federal consultations to update the baseline from the 2004 BiOp, and the agencies incorporated that information into their species-by-species analysis. NOAA 422:44385 (discussing consultations on activities that were not intended to benefit fish, like “bridge repairs, fire-suppression activities, and other activities”); NOAA B282:27744-47, 27780-85. Where possible, NMFS quantified the adverse impacts identified in its base-to-current methodology and considered adverse effects when analyzing the baseline. *See* 2008 BiOp at 8.5-54 (showing negative multiplier for avian predation); *see, e.g., id.*:8.4-15 (explaining that the baseline included projects with adverse effects).

NMFS also considered relevant BiOps in 2004, an analysis with which Plaintiffs agree. *See* NWF Reply at 33. Although this is the general methodology used in 2014—consideration of relevant biological opinions in addition to an evaluation of the available data for the salmonids in the relevant area, *see* NOAA B277:25370—NWF tries to suggest that something was different. NWF Reply at 33. Plaintiffs apparently disagree with the agencies’ decision to discuss some relevant consultations qualitatively or as general categories of actions, rather than to quantify them as part of the base-to-current methodology. But the best available science does not allow NMFS to quantify effects of all impacts—some can only be stated qualitatively. NOAA B282:27571; 2008 BiOp at 7-3–7-4, 7-11–7-12. Moreover, Plaintiffs do not even try to identify

actions wrongly excluded from the baseline. NWF Reply at 34 n.34.²⁹

NMFS's analyses fully took into account "the full natural and human context of the proposed action," as required. *NWF*, 524 F.3d at 926; *Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944, 961 (9th Cir. 2003). Plaintiffs have not seriously contested those analyses.

E. Oregon's Arguments That NMFS Failed To Consider Relevant Factors Are Belied By The Record and Contrary to the Law.

Oregon devotes over 20 pages and an entirely new declaration³⁰ to explain how, if it administered the ESA, it would conduct the technical and scientific analysis, craft an RPA, and issue a biological opinion. Oregon's preferred analysis would ignore a portion of the species' life-history—that above the FCRPS dams and in the tributary habitats—because, in their view, tributary habitat restoration cannot improve the status of listed salmonids adversely affected by their migration through the FCRPS. *See, e.g.*, OR Reply at 16-17. Instead, Oregon myopically would consider only a portion of the species' life-history—the areas encompassed within smolt-to-adult return (SAR) estimates, which measure survival downstream of tributary habitats—and adopt an RPA to improve survival only in those areas.

Oregon's arguments fail at the outset. The question is not how Oregon would conduct an

²⁹ In addition, as part of the RPA habitat programs, the Expert Panels and ERTG considered habitat improvements that address the limiting factors in salmonid habitat; that is, an analysis of adverse impacts to fish from the existing conditions, whether from cumulative effects or the baseline. Fed. Br. at 25-26; Tehan Reply Decl. ¶¶ 8-10. Plaintiffs again mischaracterize the habitat programs as ignoring the effects of actions that could degrade habitat. NWF Reply at 35-36. But, habitat improvement in both programs is measured by assessing the existing limited function of the habitat, which presents restoration opportunities, and both the Expert Panels and ERTG consider the effects of habitat problems not addressed by a proposed project during the scoring process. *See, e.g.*, 2008 BiOp at 7-44 (listing steps in estimating tributary habitat benefits). Similarly, the habitat programs under the 2004 FCRPS BiOp were expected to provide benefits, which is why there is a positive multiplier in the base-to-current adjustment in the 2008 analysis. NWF Reply at 34. But those benefits are properly based on the expected improvement, taking into consideration the existing limiting factors. NOAA B277:25490-01, 25493-94.

³⁰ Oregon previously asserted that the Nigro declaration was essential for the Court's review. ECF 1987. Oregon now has effectively abandoned it. *See* Kostow Decl. Ms. Kostow, in turn, relies on NMFS's expertise to correct Mr. Nigro's work and offers new analysis that Oregon apparently contends is, this time, essential for review. The Court should decline to supplement the record with this new declaration on reply. But, regardless, Oregon's multiple declarations, their constantly changing analysis, and the numerous deficiencies identified by NMFS's experts demonstrate that Oregon's analysis is not sufficiently developed to inform ESA decision-making or judicial review. *See* Zabel Reply Decl. ¶¶ 8-16.

ESA analysis, or whether it even agrees with NMFS. Indeed, it is black-letter law that these arguments are plainly insufficient to overturn agency action. *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989) (“When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.”); *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1333 (9th Cir. 1992) (“To set aside the Service’s determination in this case would require us to decide that the views of Greenpeace’s experts have more merit than those of the Service’s experts, a position we are unqualified to take.”). Thus, Oregon’s entire case is predicated on the incorrect notion that its preferred methods of analysis are relevant to judicial review of NMFS’s analysis performed in this ESA consultation.

In any event, Oregon’s preferred analysis does not show that NMFS committed “clear error” or ignored any “relevant factor.” *Jewell*, 747 F.3d at 601. Oregon’s analysis relies on equations (S_{\max} and R_{\max} functions) to justify sweeping assertions that tributary habitats are not limiting salmonid survival. OR Reply at 16-17. Oregon’s use of these equations, however, is not scientifically appropriate in this context. Zabel Decl. ¶ 16 (ECF 2004) (Oregon’s use of the equations has “little precedent in the field of fisheries management”); Zabel Reply Decl. ¶¶ 13, 15-16 (identifying statistical problems with Oregon’s analysis and explaining that “using [S_{\max}] as a measure of habitat capacity is even more questionable”).³¹ Nor do the equations negate the extensive evidence showing that the RPA tributary habitat program will increase survival and aid species’ recovery. 2014 BiOp at 229, 232-42; Tehan Decl. ¶¶ 12-16; Tehan Reply Decl. ¶¶ 22-29. And Oregon’s methods of dividing up the species’ lifecycle (by focusing on SARs estimates) do not show that NMFS’s “more targeted” and comprehensive methods are insufficient to

³¹ Even Oregon cannot maintain a consistent position here, relying on evidence that “habitat restoration” can improve survival. OR Reply at 19 (quoting ISAB 2015); *see also* NOAA C2020:62086 (Oregon’s draft recovery plan, finding that land-use within tributary habitat “was identified by the Oregon Snake River Expert Panel as having the most key concerns of any of the threat categories”). Nor does Oregon address any of the evidence counter to its current positions. *See, e.g.*, NOAA B9:904, 908 (study showing that egg-smolt survival (in the tributaries) is more significant for adult returns than SARs, even for “wilderness” populations).

identify where and how a species' life-cycle status can be improved. Toole Reply Decl. ¶¶ 31-37. While Oregon may prefer its analysis, "it is not required to determine the efficacy of tributary habitat actions" or the benefits of the other RPA actions. *Id.* ¶ 37.

NMFS's analysis is scientifically and technically sound, and it also complies with the law. As we previously explained, Section 7(a)(2) does not address the "proportional share of responsibility the federal agency bears for the decline in the species, but what jeopardy might result from the agency's proposed actions in the present and future human and natural contexts." *Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1093 (9th Cir. 2005); Fed. Br. at 26-27. In performing that inquiry, NMFS also must consider the effects of the "entire" agency action, *Conner*, 848 F.2d at 1454, which in this case includes the RPA's habitat actions. Despite devoting numerous pages to arguing why NMFS's analysis should focus only on a portion of the species' life-cycle (SARs) and exclude consideration of a significant portion of the RPA (habitat actions),³² Oregon ultimately admits that NMFS must consider the "*effects of the[] actions in the context of the aggregate effects on the life cycle of the species.*" OR Reply at 9 (emphasis added). This concession is fatal to Oregon's claims, because NMFS applied that inquiry. It considered the salmonids' full life-cycle, the effects of the entire RPA (including habitat restoration actions), and all other aggregate factors affecting the species. Fed. Br. at 15-16; 2008 BiOp at 1-10-1-13; 2008 NOAA B343.

Finally, Oregon cannot substantiate its remaining claims that NMFS failed to consider a "relevant" factor. Oregon asserts that NMFS failed to consider survival through the hydrosystem and in the SARs life stage. OR Reply at 6. To the contrary, NMFS considered SARs and in-river

³² Oregon's base point appears to be that the agencies must "offset" the adverse effects of the "FCRPS," and SARs quantify those effects. As explained above, Plaintiffs' legal premise that the ESA requires "offsets" is contrary to law. Moreover, SARs do not quantify the effects of this RPA, because they capture all mortality in the mainstem, the estuary, and the ocean, Toole Decl. ¶ 23 & Fig. 2, regardless of whether such mortality is caused by the RPA, *see* Corps 3669:135203 (ISAB 2014) ("Ocean conditions have a major impact on SARs beyond in-river factors"); Corps 20692:318176 (showing effect of environmental factors, such as ocean conditions, on adult returns); *see also* USBR 7617 (Rechisky et al 2014) (experimental study finding no to weak support for delayed mortality caused by hydrosystem operations).

survival, 2008 BiOp at 7-37–7-42; 2014 BiOp at 186-87, and it further considered SARs throughout its analysis, *see, e.g.*, 2014 BiOp at 124-27, 347, 368-76, 379, 453; Graves Reply Decl. ¶¶ 4-5. NMFS also relied on numerous RPA actions specifically directed at improving survival in those life-history stages encompassed within a SARs estimate. *See* Toole Decl. ¶¶ 37-43. Oregon next implies that NMFS “ignored” SARs because it includes conditions in the ocean. *See, e.g.*, OR Reply at 21. The record refutes this claim as well. NMFS specifically considered ocean conditions and their effects on salmonids, *see, e.g.*, 2014 BiOp at 153-60, and NMFS’s life-cycle metrics and analysis take into account all mortality, including that occurring in the ocean, *see, e.g., id.* at 48-50; Graves Reply Decl. ¶ 7.³³ Oregon then shifts to a new argument—that NMFS failed to explain why SARs for some populations are lower than others. OR Reply at 24. This claim, too, lacks merit. NMFS performed a detailed analysis of each species, *see, e.g.*, 2008 BiOp, Chapters 8–8.14, and Oregon never explains why comparing the SARs of different species is relevant to NMFS’s evaluation of how the RPA affects each species at issue in this consultation. *See also* Graves Reply Decl. ¶¶ 6-7 (further explaining why Oregon’s proffered comparisons are incomplete and fail to support its claims). Lastly, Oregon protests that NMFS ignored low population sizes. OR Reply at 20. Here again, Oregon is wrong. NMFS performed an extinction risk analysis that considers the threats of low population abundances, *see, e.g.*, 2014 BiOp at 64-66, 84-88, and it analyzed how this RPA will improve the species’ abundance, productivity, spatial structure, and diversity, *id.* at 468-471; Fed. Br. at 9-10. Accordingly, NMFS considered each “factor” Oregon contends was ignored.

In short, Oregon advances a policy position. It singles out the FCRPS as being different from other ESA consultations—such as the *United States v. Oregon* harvest BiOp³⁴—and argues

³³ Oregon summarizes that its complaint is centered on estimating latent mortality (mortality caused by the FCRPS dams and operations occurring in later life stages). OR Reply at 10. But Oregon admits that quantifying latent mortality is not possible. Kostow Decl. ¶ 22. And Oregon continues to miss the point. Whatever level of latent mortality is occurring, that mortality is accounted for in NMFS’s quantitative (indicator metrics that encompass the species’ entire life-cycle) and qualitative (evaluating limiting factors and threats) analyses. Fed. Br. at 28-29.

³⁴ Oregon’s explanation that its challenge here is consistent with its support of NMFS’s harvest BiOp—because one BiOp included an RPA and one did not—has no merit. OR Reply at 4.

that its preferred standards and methodology must be used. The Ninth Circuit has firmly rejected these arguments. *Jewell*, 747 F.3d at 610 (“Our deference to agency determinations is at its greatest when that agency is choosing between various scientific models.”). The Court should do the same and uphold NMFS’s reasoned analysis in the 2008 and 2014 BiOps.³⁵

III. NMFS RATIONALLY CONCLUDED THAT THE RPA IS NOT LIKELY TO ADVERSELY AFFECT THE SOUTHERN RESIDENT KILLER WHALE DISTINCT POPULATION SEGMENT.

In the 2014 BiOp, NMFS concurred with the Action Agencies’ conclusion that the FCRPS is not likely to adversely affect the Southern Resident Killer Whale (SRKW or whales). Fed. Br. at 55-59; 2014 BiOp at 481-87; 50 C.F.R. § 402.13(a). Plaintiffs continue to suggest that the agencies incorrectly used the ESA’s informal consultation procedures and reiterate their argument that other NMFS BiOps show that the analysis in the 2014 BiOp is arbitrary. Again, Plaintiffs ignore the updated analysis in the 2014 BiOp and do not dispute the fundamental point regarding the FCRPS’s impacts on whales: NMFS’s finding that the “Columbia basin hatchery production offsets losses to the killer whale prey base due to the existence and operation of the hydrosystem.” 2014 BiOp at 483. They also do not dispute that the best available science in the 2014 BiOp is that one should use “considerable caution” when suggesting that there is a linear causal relationship between Chinook abundance generally and whale survival. *Id.* at 483, 485. Nor do Plaintiffs acknowledge that attributing all possible impacts on Chinook to the FCRPS likely overestimates the effects on SRKW, as already discussed. *See* Fed. Br. at 56 (explaining that much of the summer diet of SRKW comes from another river system—the Fraser River).

Whether it is an RPA (FCRPS) or a proposed action (harvest), the ESA’s standard is the same: agency action must not jeopardize the continued existence of a listed species. *See* 16 U.S.C. § 1536(b)(3)(A) (RPA is an action that “would not violate” Section 7(a)(2)). Oregon also disregards that both BiOps use the exact same analysis, which Oregon contends is lawful in *United States v. Oregon*, but unlawful here. Fed. Br. at 27. These inconsistent positions highlight Oregon’s adherence to a policy position, not the science or the law.

³⁵ The Nez Perce Tribe’s complaints with one aspect of the agencies’ contingency planning—consideration of dam breaching—fails for the same reasons. NPT Reply at 16-19. The Tribe is advancing a policy argument that the agencies should have structured the RPA differently. These arguments do not address the “only relevant question”—whether the RPA actually adopted is supported and complies with the ESA. *Sw. Ctr. for Biological Diversity*, 143 F.3d at 523.

Plaintiffs reassert their arguments that NMFS BiOps in other contexts undermine the 2014 analysis. NWF Reply at 42-43. As already explained, Plaintiffs selectively excerpt quotations from the CVP BiOp (2010 NOAA BB281) and the 2009 Fisheries BiOp (2010 NOAA BB280). Fed. Br. at 58 & n.46.³⁶ Setting aside those deficiencies, in 2014, NMFS used the best available scientific data, which includes the findings of an independent group of experts who analyzed the status and threats to the SRKW coast-wide while studying impacts from salmon fisheries. This study was not available when the Fisheries and CVP BiOps were prepared. *See* 2014 BiOp at 483-87 (citing Hilborn); 2014 NOAA B166. Based on this comprehensive, independent analysis, including its conservative assumptions of prey needs, NMFS found in the 2014 BiOp that the evidence did not show that available prey was insufficient to meet the SRKW's metabolic needs. *See* 2014 BiOp at 484-85. Again, NWF presents no better data to suggest that the Chinook returns are insufficient for the SRKW and, by primarily relying on NMFS's own prior BiOps, cites no "new" information about the health of the SRKW population that NMFS failed to consider in preparing the 2014 BiOp.

Because NMFS evaluated the best available science and considered the baseline in conjunction with the impacts of the FCRPS RPA, the Court need not reach the separate question of whether Plaintiffs misinterpret the informal consultation regulations by urging that a baseline analysis is required. *Cf.* NWF Reply at 41-42. Even so, Plaintiffs incorrectly argue that the formal and informal consultation standards are the same, when the agency has reasonably interpreted them differently. *Id.* The standard for informal consultation – and thus the relevant standard here – is whether the proposed action is "likely to adversely affect" a listed species or its critical habitat. 50 C.F.R. § 402.13(a). If the action is "not likely to adversely affect" the species, the consultation ends.³⁷ The ESA does not refer to an "environmental baseline," let

³⁶ Although NWF's selective citations would suggest otherwise, in the CVP BiOp, NMFS concluded that the operation of the dams, along with the RPA for that action, would *not* jeopardize the SRKW. *See* 2010 NOAA BB281 at 718; *see also* 2010 NOAA BB280 at 58 (same for the Fisheries BiOp).

³⁷ The phrase "not likely to adversely affect" is limited to effects that are beneficial, insignificant, or discountable. ESA Consultation Handbook (Mar. 1998), at xv & 3-12. Plaintiffs

alone require it to be evaluated during informal consultation, 16 U.S.C. § 1536(a)(2), and the applicable informal consultation regulations do not require it, *see* 50 C.F.R. § 402.13.

Thus, contrary to Plaintiffs' suggestion, NWF Reply at 41, the informal consultation regulations do not mention the "effects of the action," a term of art that includes reference to "environmental baseline" and is used only in the *formal* consultation regulations. 50 C.F.R. § 402.14(g)(3).³⁸ And the case law belies Plaintiffs' efforts to graft these new requirements into the informal consultation regulations. *Jones v. NMFS*, 10-cv-6427 HO, 2011 WL 4501956, at *7 (D. Or. Sept. 27, 2011), *aff'd*, 741 F.3d 989 (9th Cir. 2013); *Pac. Coast Fed'n of Fishermen's Ass'ns v. NMFS*, 482 F. Supp. 2d 1248, 1267 n.10 (W.D Wash. 2007); *cf. Conservation Cong. v. U.S. Forest Serv.*, 720 F.3d 1048, 1056 (9th Cir. 2013) (explaining that neither the ESA nor its regulations require a cumulative effects analysis in informal consultation); Fed Br. at 56-57.

In sum, NMFS thoroughly examined the background status of the SRKW and the impacts of the FCRPS RPA, and it properly evaluated whether the agency action (operation of the FCRPS, not baseline harms, *see NWF v. NMFS*, 524 F.3d at 930) is likely to adversely affect the SRKW. Fed. Br. at 56-59; 2014 BiOp at 483-87. NMFS also rationally concluded that the action agency does not cause any deterioration of the whale's prey base, because it has no impact on Chinook availability for the SRKW.³⁹ NMFS provided a thorough analysis, beyond what was

acknowledge this standard, *see* NWF Reply at 41 n.32, but argue that the agency somehow failed to investigate "even small effects," *id.* at 43. The definition of "insignificant," however, is "small or unimportant," *see* www.merriam-webster.com/dictionary/insignificant (last visited May, 5, 2015), and this refutes Plaintiffs' arguments, *see* Handbook at 3-12 (defining insignificant).

³⁸ Plaintiffs suggest that the "effects of the action" must be considered via the Action Agencies' biological assessment. However, the contents of the Action Agencies' biological assessment are discretionary and may, but need not, consider the "effects of the action." *See* 50 C.F.R. § 402.12(f); *Conservation Cong.*, 720 F.3d at 1056 ("The contents of a biological assessment are at the '*discretion*' of the federal agency.").

³⁹ NWF, by using the phrase "comparative approach" tries to insinuate that NMFS is isolating the operation of the dams from any negative effects caused by them, *see* NWF Reply at 42 (citing *NWF v. NMFS*). NWF however, wisely does not make this argument directly because NMFS here is not creating a "reference operation" to estimate the impact of the dams on salmon, as it did in 2004. NMFS instead considered the decreased output of salmon due to dam operations and concluded that, combined with hatchery production in the system, there was no decrease in prey. It is beyond dispute that NMFS does not use the rejected "comparative approach" discussed in *NWF v. NMFS*, 524 F.3d at 926.

required in the ESA, and NWF presents no credible challenge to the fundamentals of this analysis. Accordingly, NMFS's expert judgment must be upheld.

IV. RECLAMATION AND THE CORPS HAVE COMPLIED WITH THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA).

Plaintiffs' Reply confirms that their sole contention is that NEPA requires the Action Agencies to prepare a single Environmental Impact Statement (EIS) evaluating the RPA as a whole. Not only have they waived this argument, but it is barred by Ninth Circuit precedent.

A. Plaintiffs Have Waived Their NEPA Claims.

Prior to challenging an agency's NEPA compliance in court, a plaintiff must first raise its concerns with the agency, *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 967 (9th Cir. 2006), to "allow the agency to give the issue meaningful consideration." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 764 (2004). On reply, Plaintiffs do not argue that they raised any concern about NEPA compliance prior to filing their complaint. Nor do they argue that their concerns were "so obvious" that their failure to raise them is excused. *See Ilio'ulaokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1091-92 (9th Cir. 2006). As a result, they have waived their claim.

Attempting to avoid this result, Plaintiffs re-characterize Federal Defendants' argument as asserting that Plaintiffs were required to remind the agencies generally that NEPA applies to their actions. NWF Reply at 48. Federal Defendants argue no such thing. As discussed in our opening brief and below, the Action Agencies are aware of their NEPA obligations and have relied upon a wealth of NEPA analyses for implementation of their RPA actions. If Plaintiffs believed that the Action Agencies' mode of NEPA compliance (which the agencies consistently described in their 2014, 2010, and 2008 decision documents) was inadequate, then they should have raised this issue before filing their seventh supplemental complaint.

Plaintiffs attempt to avoid the consequence of their inaction by arguing that a plaintiff cannot waive a "procedural challenge" under NEPA. NWF Reply at 49. However, Plaintiffs fail to cite any relevant authority for their contention. Instead, they rely on *Northwest Environmental Defense Center v. BPA*, 117 F.3d 1520 (9th Cir. 1997) (*NEDC*), an inapposite case addressing

waiver under the Northwest Power Act. The *NEDC* plaintiffs claimed that BPA violated the Northwest Power Act by entering into a storage agreement without complying with a public review requirement under the statute. *Id.* at 1528. The Ninth Circuit rejected BPA’s argument that plaintiffs had waived the claim by not raising it in administrative proceedings, holding that “BPA has a duty to comply with public participation processes provided for in the Northwest Power Act regardless of whether participants complain of violations.” *Id.* at 1535.

NEDC is inapposite because it addresses the Northwest Power Act—not NEPA. It is also distinguishable because, unlike in *NEDC*, the Plaintiffs here do not assert that the agencies failed to comply with some public participation or similar “process” requirement; they take issue with the adequacy and form of the agencies’ analyses. Further, the Ninth Circuit has never actually applied any “procedural” exception to the waiver rule in a NEPA case. *See Ilio’ulaokalani Coal.*, 464 F.3d at 1092 (noting supposed “distinction” applying to procedural violations but rejecting waiver argument because alleged defect was “so obvious”). Such an exception would swallow the rule because NEPA contains *only* procedural requirements. *See Conservation Cong. v. Finley*, 774 F.3d 611, 615-16 (9th Cir. 2014) (“NEPA does not provide substantive protections, only procedural ones—it ‘exists to ensure a process.’”) (quoting *McNair*, 537 F.3d at 1000).⁴⁰

Finally, Plaintiffs claim that they have not waived their NEPA claim because they “sufficiently and repeatedly raised the substance of their NEPA complaint”—which they characterize as the need to consider alternatives to the RPA. NWF Reply at 49.⁴¹ To avoid

⁴⁰ While not expressly discussing the issue, decisions from other circuits are inconsistent with such an exception. *See Friends of the Norbeck v. U.S. Forest Serv.*, 661 F.3d 969, 973 (8th Cir. 2011); *Nevada v. Dep’t of Energy*, 457 F.3d 78, 88-89 (D.C. Cir. 2006). This is also true for several decisions from district courts in this Circuit. *See, e.g., La Cuna De Aztlan Sacred Sites Prot. Circle v. W. Area Power Admin.*, No. 12-cv-00005-VAP, 2012 WL 6743790, at *9 (C.D. Cal. Nov. 29, 2012) (finding argument that agency was required to prepare a programmatic EIS in addition to site-specific EIS was waived by failure to raise the issue before filing suit); *United States v. W. Radio Serv.*, 869 F. Supp. 2d 1282, 1286 (D. Or. 2012) (finding that plaintiff did not raise “even implicitly or inexactly” their NEPA claims, including their claim that agency improperly segmented analysis).

⁴¹ Plaintiffs’ and amicus’ suggestions that NEPA would require evaluation of a “dam removal” alternative are not supported by case law. Under NEPA’s rule of reason, an agency must consider “only reasonable or feasible” alternatives. *Am. Rivers v. FERC*, 201 F.3d 1186, 1200 (9th Cir. 1999) (rejecting argument FERC had to evaluate in detail alternative of dam removal);

waiver, a claimant “need not raise an issue using precise legal formulations, as long as enough clarity is provided that the decision maker understands the issue raised.” *Lands Council v. McNair*, 629 F.3d 1070, 1076 (9th Cir. 2010). But Plaintiffs’ comments during the administrative process said nothing at all about the agencies’ NEPA analyses and, thus, the agencies had no reason to believe that Plaintiffs questioned their adequacy. *See* ECF 1900; Corps 10:1621-28. And Plaintiffs’ prior conduct in this litigation is completely inconsistent with their current claim: in addition to never mentioning NEPA, Plaintiffs asked the Court in 2008 to order Federal Defendants *to implement* the RPA actions (other than certain measures related to hydropower operations). ECF 1627 at 5-6; ECF 1831 at 12 n.19 (noting request in 2011 brief). Plaintiffs apparently were not troubled by the agencies’ NEPA analyses then, or at any other point prior to filing their seventh supplemental complaint. The Court should not countenance this gamesmanship. Instead, it should find that Plaintiffs have waived their NEPA claim.⁴²

B. NRIC, not Jewell, Controls this Case.

Even if Plaintiffs had not waived their NEPA claim, the claim lacks merit. The dispositive question for Plaintiffs’ NEPA claim is whether the Action Agencies’ implementation of RPA actions requires a single EIS, or whether the agencies could instead analyze those actions in separate NEPA documents. The Ninth Circuit has already answered this very question with respect to the FCRPS, and Plaintiffs’ claim fails.

Whether an agency must evaluate multiple undertakings in a single NEPA document is controlled by CEQ’s regulations. *Pac. Coast Fed’n of Fishermen’s Ass’ns v. Blank (PCFFA)*, 693 F.3d 1084, 1098-99 (9th Cir. 2012). The Ninth Circuit has previously applied these

Westlands Water Dist. v. U.S. Dep’t of Interior, 376 F.3d 853, 868 (9th Cir. 2004) (range of alternatives “need not extend beyond those reasonably related to the purposes of the project”).

⁴² Plaintiffs assert that waiver cannot apply outside a “NEPA administrative proceeding.” NWF Reply at 48. No case law supports this argument and it would conflict with the purpose of the waiver doctrine, namely to ensure prior to litigation that an agency has an opportunity to give meaningful consideration to any issues Plaintiffs may identify. *See Public Citizen*, 541 U.S. at 764; *McNair*, 629 F.3d at 1076 (purpose of exhaustion requirement is to “permit administrative agencies to utilize their expertise, correct any mistakes, and avoid unnecessary judicial intervention in the process.”).

regulations to hold that Federal Defendants' actions aimed at improving fish survival related to the FCRPS need not be addressed in a single EIS. *Nw. Res. Info. Ctr. v. NMFS (NRIC)*, 56 F.3d 1060, 1069 (9th Cir. 1995). The court expressly rejected the idea that measures involving transportation, spill, "harvest limits, hatchery releases, and habitat maintenance" to benefit salmon must be evaluated in the same NEPA document. *Id.* This is because "we . . . cannot force an agency to aggregate diverse actions to the point where problems must be tackled from every angle at once. To do so risks further paralysis of agency decisionmaking." *Id.*

This rationale applies equally today. RPA actions include, among others: operating the storage projects for flow management (RPA action 4); implementing operations at the run-of-the-river projects to benefit listed salmonids (RPA action 5); making various structural improvements to the FCRPS projects to maximize fish survival (RPA actions 18-28); continuing the juvenile fish transportation program (RPA action 30); undertaking specific habitat improvement projects in four states (RPA actions 34-38); ensuring reform of hatchery practices and preservation of genetic resources (RPA actions 39-42); and implementing various actions reducing predation on salmonids by diverse predators (RPA Actions 45-49). Corps 9:1293-1370. Such actions have independent utility: there is no question that they "might reasonably have been completed without the existence of the other[s]." *PCFFA*, 693 F.3d at 1098; *NRIC*, 56 F.3d at 1068-69 ("Either the transportation program or the flow improvement measures, standing alone, would benefit the salmon"). Requiring the agencies to aggregate these "diverse actions" into a single EIS (rather than, as discussed below, evaluating them through various NEPA analyses) would create "further paralysis of agency decisionmaking." *Id.* at 1069.⁴³

⁴³ Plaintiffs argue that *Jewell* bars the agencies from arguing that a single EIS would be impracticable. NWF Reply at 44. Not so. *Jewell* indicated only that onerous cost or time requirements cannot excuse an agency's duty to comply with NEPA. 747 F.3d at 644. It did not contradict well-established law that an agency may structure its NEPA analyses to avoid impracticalities. *Kleppe v. Sierra Club*, 427 U.S. 390, 414 (1976) ("Even if environmental interrelationships could be shown conclusively to extend across basins and drainage areas, practical considerations of feasibility might well necessitate restricting the scope of comprehensive statements."); *Inland Empire Pub. Lands Council v. U.S. Forest Serv.*, 88 F.3d 754, 764 (9th Cir. 1996) ("NEPA does not require the government to do the impractical"); *Wetlands Action Network v. U.S. Army Corps of Eng'rs*, 222 F.3d 1105, 1119 (9th Cir. 2000).

Plaintiffs do not address *NRIC*, but argue that the CEQ regulations *NRIC* applied do not control here because the RPA is “part of an integrated ‘suite’ of actions that must all be developed to fully avoid jeopardy.” NWF Reply at 46. *NRIC* precludes this argument too. The *NRIC* court expressly recognized that it was addressing challenges to the agency efforts to “come up with a viable *program* to preserve the dwindling stocks of wild salmon in the Columbia River and its tributaries in the Pacific Northwest.” 56 F.3d at 1063 (emphasis added). *See also* Corps 582:66866 (explaining that actions called for in various biological opinions addressing FCRPS, although sharing a common purpose, need not be addressed in same EIS under CEQ regulations).

Finally, *Jewell* does not support Plaintiffs’ view that all RPA actions should have been analyzed in a single comprehensive EIS. *Jewell* addresses only *whether* an action agency must comply with NEPA when implementing actions addressed in a BiOp, not *how* it must do so. Fed. Br. at 66. The “how” question is instead answered by the Ninth Circuit’s holding in *NRIC*.

While Plaintiffs wish to interpret *Jewell* more broadly, they concede that the district court decision appealed in *Jewell* expressly limited the focus of the NEPA compliance to “project operations,” which comprised only a portion of the RPA actions at issue. NWF Reply at 44. Plaintiffs nonetheless claim that the Ninth Circuit elected to expand the issue before it on its own. *Id.* This argument finds no support in the *Jewell* decision. The Ninth Circuit’s discussion of why NEPA applied to Reclamation’s BiOp implementation, just like that of the district court, focused exclusively on operations. 747 F.3d at 646. And the Ninth Circuit’s reliance upon Reclamation’s notice of intent to prepare an EIS—which established that the new EIS would address *only* project operations—confirms this narrow focus. *Id.* at 642 n.47.

In sum, the Ninth Circuit has clearly indicated that Federal actions aimed at improving fish survival related to the FCRPS need not be addressed in a single EIS, *NRIC*, 56 F.3d at 1069, and *Jewell* is not to the contrary. Accordingly, Plaintiffs’ argument that the agencies should have analyzed the RPA actions in a single EIS fails.⁴⁴

⁴⁴ Plaintiffs have abandoned any claim that Federal Defendants violated NEPA because they failed to supplement their existing NEPA analyses. NWF Reply at 47 n.52 (“NWF is not arguing

C. Plaintiffs Demonstrate No NEPA Violation For Any RPA Action(s).

In their reply brief, Plaintiffs also argue that the agencies' NEPA documents do not "address the environmental impacts of this 'suite of 74 actions'" or "alternatives to the agencies' overall approach" as is necessary for their decisions to "adopt the 2014 BiOp/RPA." NWF Reply at 46. This contention simply reiterates their first argument, and it therefore fails. As discussed above, there is no requirement that the agencies view their implementation of RPA actions as a single proposal for purposes of NEPA.

The proper focus for NEPA compliance is on the Action Agencies' implementation of their individual RPA actions—not their decision documents.⁴⁵ Plaintiffs could have challenged the agencies' NEPA compliance by pointing out any inadequacies in NEPA coverage for specific RPA actions that constitute major federal actions (akin to the changes in system operations in *Jewell*), but they expressly decline to do so. NWF Reply at 45 n.47. They therefore fail to meet their burden. *Te-Moak Tribe v. U.S. Dep't of Interior*, 608 F.3d 592, 605 (9th Cir. 2010).

Further, any suggestion that the Corps' and Reclamation's implementation of RPA actions generally occurs without analysis under NEPA is belied by the record.⁴⁶ As described in our opening brief, a broad range of alternative operations of the hydrosystem was evaluated in the exhaustive Columbia River System Operation Review Final EIS (SOR EIS), and in several later EISs, which built upon the SOR EIS and evaluated structural modifications and certain revised operations. Corps 562; 569; 582.⁴⁷ The Corps and Reclamation analyzed many of their

that supplementation of these old documents can comply with NEPA."'). The Court thus need not address the claim. *Adriana Int'l Corp. v. Thoeren*, 913 F.2d 1406, 1408 n.1 (9th Cir. 1990).

⁴⁵ The agencies could have, consistent with applicable authorities, issued separate decision documents for each of the RPA actions for which they are responsible. *See* 50 C.F.R. § 402.15(a) ("Following the issuance of a biological opinion, the Federal agency shall determine whether and *in what manner* to proceed with the action . . .") (emphasis added).

⁴⁶ For a tangible demonstration of the breadth of the agencies' NEPA undertakings, the agencies' AR indices tendered to the Court have NEPA sections listing hundreds of documents.

⁴⁷ Ongoing efforts to reduce impacts on listed fish have resulted in additional structural and operational modifications to the system. This was contemplated in the SOR EIS record of decision. Corps 565:58878, 80 (selected alternative's "adaptive management approach" contemplated that "operations may be modified in-season and/or year-to-year based upon new scientific information or to support studies for long-term configuration changes"). Plaintiffs do

other RPA actions in more narrowly focused NEPA documents. For instance, RPAs 18 through 28 call for structural modifications at various dams, and the agencies generally addressed their implementation through new or existing project-specific environmental assessments (EAs), or Memoranda for Record (or similar documents) documenting NEPA compliance. *See, e.g.*, Corps 598, 614, 621, 639, 658, 660, 661, 669, 670, 677, 678, 679, 683, 685, 686, 687, 690, 692, 704, 801, 846, 862, 864, 887, 888. The agencies relied on numerous site-specific EAs evaluating specific habitat projects contemplated in RPAs 34-37. *See, e.g.*, USBR 59704, 59626, 56116; Corps 715, 729, 802, 899, 914, 915. They relied on NEPA documents evaluating improvements to hatcheries. *See, e.g.*, Corps 699, 838; USBR 94474. And they relied on NEPA documents evaluating RPA actions related to predation control (RPA 45-48).⁴⁸ Corps 576, 637, 646, 726, 766, 806, 848.⁴⁹

The above-cited documents are in the administrative record. Plaintiffs had the opportunity to identify any deficiencies in these documents or otherwise argue that the agencies'

not argue that the improvements to the system are qualitatively outside the range of operations alternatives previously evaluated in the agencies' EISs. *See Cal. Ex Rel. Imperial Cnty. v. U.S. Dept. of the Interior*, 767 F.3d 781, 795 (9th Cir. 2014) (supplemental EIS (SEIS) is not required when final decision falls "within the range of alternatives" considered in an EIS) (quoting *Russell Country Sportsmen v. U.S. Forest Serv.*, 668 F.3d 1037, 1048 (9th Cir. 2011)); *In re Ops. of Mo. River System Litig.*, 516 F.3d 688, 693 (8th Cir. 2008) (no SEIS required for change that is "qualitatively within the spectrum of alternatives that were discussed" in prior EIS); *Prot. Our Cmty's Found. v. U.S. Dep't of Agric.*, 845 F.Supp.2d 1102, 1110 (S.D. Cal. 2012) (imposition of "minimizing measure" will "usually fall within the scope of the original NEPA analysis"). They do argue in general terms that certain of the agencies' EISs (presumably those applicable to operations) are no longer up to date. However, they still provide no detail as to why any new information is sufficiently material that the agency's failure to supplement specific analyses violated NEPA. *See All. for the Wild Rockies v. U.S. Dep't of Agric.*, 772 F.3d 592, 607 (9th Cir. 2014) (upholding determination that plaintiff failed to meet its burden of demonstrating need for supplemental NEPA). And Plaintiffs abandon any claim that supplementation (which would be the presumptive cure for a stale NEPA document) is necessary. NWF Reply at 47 n. 52.

⁴⁸ The agencies continue to prepare analyses to comply with NEPA: on February 15, 2015, for RPA 46, the Corps issued a final EIS addressing its management plan to reduce predation by double-crested cormorants in the Columbia River Estuary. 80 Fed. Reg. 8081 (Feb. 15, 2015).

⁴⁹ Other RPA actions, such as RPA actions relating to reporting and many of the research, monitoring, and evaluation actions do not have direct impacts necessitating NEPA analysis. *See Northcoast Envtl. Ctr. v. Glickman*, 136 F.3d 660, 670 (9th Cir. 1998). Similarly, the preparation of operations plans generally does not require preparation of a NEPA analysis. *Grand Canyon Trust v. U.S. Bureau. of Reclamation*, 691 F.3d 1008, 1022 (9th Cir. 2012).

NEPA analysis for any specific RPA action is inadequate. Having failed to do so, they cannot save their NEPA claim with conclusory assertions of non-compliance on a programmatic level.

CONCLUSION

NMFS has reasonably interpreted and applied the ESA, implementing regulations, and the best available scientific evidence in this FCRPS consultation. That, in and of itself, should be the end of the inquiry. But if more is needed to demonstrate the agencies' commitment to ensuring compliance with the law, the record is not lacking. NMFS did not focus on identifying an RPA that merely avoids "appreciable" reductions to survival and recovery or actions that destroy or adversely modify critical habitat. Instead, NMFS focused on ensuring that this RPA will improve the species' survival and recovery and the conservation function of critical habitat.

Likewise, the agencies chose not to manage the ESA consultation or implement the RPA alone. While not required under the ESA, the agencies instead relied on near-constant coordination and collaboration with States, Tribes, and other stakeholders to ensure that the biological opinion is scientifically and legally sound, and that implementation of the RPA actions is successful. And the agencies have not spent the last six years arguing with others on what constitutes the best course of action. Instead, they adopted a strategy in coordination with the regional stakeholders and then immediately went to work, in the field and with their partners, to modify dams, alter hydrosystem operations, restore habitats, manage and reduce predation, monitor fish populations, and conduct essential research, and take those other actions that are needed to advance the protection and recovery of the fish.

This RPA is not theoretical. It has been implemented, and it is producing results. The first six years of this ten-year biological opinion have passed, and there are four years remaining to fully implement this RPA. In view of the record before this Court and the overwhelming evidence of good faith and reasonable implementation and application of the ESA and NEPA, the Federal agencies, regional sovereigns, and interested stakeholders should be allowed to complete the implementation of this RPA and thereby continue to improve the survival and recovery prospects of listed salmonids, as well as the functioning of designated critical habitat.

Dated May 6, 2015

S. AMANDA MARSHALL
United States Attorney
COBY HOWELL, Senior Trial Attorney
U.S. Department of Justice
c/o U.S. Attorney's Office
1000 SW Third Avenue
Portland, OR 97204-2902
Tel: (503) 727-1023 | Fax: (503) 727-1117
Email: Coby.Howell@usdoj.gov

JOHN C. CRUDEN, Assistant Attorney General
SETH M. BARSKY, Section Chief

/s/ Michael R. Eitel
MICHAEL R. EITEL, Trial Attorney
ANDREA GELATT, Trial Attorney
U.S. Department of Justice
Environment & Natural Resources Division
Wildlife & Marine Resources Section
999 18th Street, South Terrace, Suite 370
Denver, Colorado 80202
Tel: (303) 844-1479 | Fax: (303) 844-1350
Email: Michael.Eitel@usdoj.gov;
Andrea.Gelatt@usdoj.gov

ROMNEY S. PHILPOTT, Trial Attorney
U.S. Department of Justice
Environment & Natural Resources Division
Natural Resources Section
601 D Street, N.W.
Washington, DC 20004
Tel: (202) 305-0258 | Fax: (202) 305-0274
Email: Romney.Philpott@usdoj.gov

Attorneys for Federal Defendants

CERTIFICATE OF SERVICE

I certify that on May 6, 2015, the foregoing was electronically filed through the Court's electronic filing system, which will generate automatic service upon on all Parties enrolled to receive such notice. I also certify that the following will be manually served via overnight mail:

Dr. Howard F. Horton, Ph.D.
U.S. Court Technical Advisor
Professor Emeritus of Fisheries
Department of Fisheries and Wildlife
104 Nash Hall
Corvallis, Oregon, 97331-3803
Tel: (541) 737-1974

/s/ Michael R. Eitel
Michael R. Eitel
Trial Attorney, USDOJ