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TABLE OF ACRONYMS

The following is a list of acronyms and terms used in this document or the Administrative Record

ABC	Acceptable Biological Catch
AI	Aleutian Islands
AFSC	Alaska Fisheries Science Center
APA	Administrative Procedure Act
BiOp	Biological Opinion
BSAI	Bering Sea and Aleutian Islands
CIE	Center for Independent Experts
Council	North Pacific Fishery Management Council
Councils	Regional Fishery Management Councils
DPS	Distinct Population Segment
EA	Environmental Assessment
EIS	Environmental Impact Statement
EBS	East Bering Sea
EDPS	Eastern Distinct Population Segmentf
EEZ	Exclusive Economic Zone
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FIT	Fishery Interactions Team
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
FWS	Fish and Wildlife Service
GOA	Gulf of Alaska
IFR	Interim Final Rule (75 Fed. Reg. 77,535 (Dec. 13, 2010))
JAM	Jeopardy or Adverse Modification
mt	Metric tons (1 metric ton = 1000 kg)
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NMML	National Marine Mammal Laboratory
NPFMC	North Pacific Fishery Management Council
OFL	Overfishing Limit
POP	Platform of Opportunity observation data on Steller sea lion locations
PRD	NMFS Protected Resources Division
RPA	Reasonable and Prudent Alternative
SAFE	Stock Assessment and Fishery Evaluation

SFD	NMFS Sustainable Fisheries Division
SSL	Steller sea lions
SSLMC	Steller sea lion Mitigation Committee
TAC	Total Allowable Catch
WDPS	Western Distinct Population Segment of Steller sea lions

Federal Defendants National Marine Fisheries Service (“NMFS”); United States Department of Commerce; Penny Pritzker, in her official capacity as Secretary of the U.S. Department of Commerce; Eileen Sobeck, in her official capacity as NMFS Assistant Administrator for Fisheries; James W. Balsiger, in his official capacity as NMFS Regional Administrator, Alaska Region, hereby move for summary judgment on all claims, and respond in opposition to Plaintiffs’ Principal Brief On Summary Judgment (ECF No. 45).

INTRODUCTION

In 2014, NMFS adopted Steller sea lion protective measures (“2014 Final Rule”) that limit fishing for Atka mackerel, pollock, and Pacific cod in the Aleutian Islands (“AI”) in order to reduce and mitigate potential impacts to the endangered Western Distinct Population Segment (“WDPS”) of Steller sea lions. Like the 2010 Interim Final Rule (“IFR”) it replaced, the 2014 Final Rule seeks to protect Steller sea lions from any jeopardy or adverse modification, as defined by section 7 of the Endangered Species Act (“ESA”), due to prey competition from harvesting these groundfish species important to the sea lions’ diet. It has long been understood that there are enough fish in the action area to feed a growing and recovering Steller sea lion population. While it is uncertain whether fisheries cause any harm to sea lions through prey competition, if such harms occur, it would be through “localized depletions” (temporary prey depletions in specific locations and times). The protective measures thus limit the quantity of harvests, impose gear restrictions, close important sea lion foraging areas to fishing, and disperse harvest seasonally to avoid localized depletions. The 2014 biological opinion (“2014 BiOp”) carefully analyzed these protective measures, and reasonably found they would likely avoid almost entirely any localized depletions of prey. As a result, the authorized fisheries are not likely to reduce the survival, growth, or reproduction of Steller sea lions to an extent that would impair the survival or recovery of the WDPS, or the sub-regional populations¹ identified as important in the species’ 2008 Recovery Plan. Thus, implementation of the 2014 Final Rule was found not likely to jeopardize the continued existence of the WDPS or adversely modify critical habitat. In addition, NMFS’s careful analysis of the alternatives, and its documentation of

¹ The Steller Sea Lion Recovery Plan and BiOps divide the area the WDPS occupies into seven geographic “sub-regions.” These seven sub-regions correspond with designated fishery management areas. This BiOp focused on Areas 541 and 542, in the Central Aleutian Islands sub-region, and Area 543, which is equivalent to the Western Aleutian Islands sub-region. The 144° W. longitude line is the eastern boundary of the WDPS. *See* 2014 BiOp Fig. 3-2, at 1027588.

environmental effects, fully complied with the National Environmental Policy Act (“NEPA”).

The abundance of Steller sea lions in the WDPS has steadily increased for a decade. But, the 2008 Recovery Plan calls for maintaining populations across all seven sub-areas in the WDPS. While most sub-regions, and the WDPS as a whole, are growing, the population of Area 543, the Western Aleutian Islands sub-region is declining steeply, and Area 542 in the Central Aleutians sub-region, while more stable, may also be decreasing. NMFS conservatively regulates fisheries in the Aleutian Islands to avoid undermining population growth at the level of these sub-regions.

NMFS closely regulates the fisheries in a precautionary manner, even though it is uncertain whether prey competition from fisheries is having any effect on Steller sea lion population trends. Several factors could potentially contribute to population declines in Areas 543 and 542 in the Western and Central Aleutian Islands, including fisheries-induced nutritional stress from localized prey depletions, killer whale predation, disease, environmental regime change, or contaminants such as mercury. Despite many years of intensive study, the role and relative importance of these factors is still not clear. As noted above, if prey competition from fisheries is indeed a factor, it would result from “localized depletion” of key groundfish stocks at particular times, and in particular locations, so as to cause chronic nutritional stress affecting Steller sea lion growth and reproductive success. Whether fisheries-induced nutritional stress is a real causal factor in current population trends remains a matter of intense scientific debate. Nevertheless, the 2014 BiOp takes a precautionary approach, erring on the side of the sea lions by assuming that groundfish harvests could, if not sufficiently limited and dispersed, cause localized depletions harmful to Steller sea lion populations. The 2014 BiOp carefully evaluates the best available science on Steller sea lions and the fisheries, and thoroughly documents how the 2014 Final Rule’s suite of protective measures, combined with other management measures, will effectively limit groundfish harvests and disperse them temporally and spatially, so as to avoid any significant localized depletions of pollock, Atka mackerel, or Pacific cod.

Contrary to Plaintiffs’ arguments, the 2014 BiOp’s conclusions were reasonable and well supported. Plaintiffs oppose the 2014 Final Rule because in some areas it reduces area closures implemented in the 2010 IFR, which were found in a 2010 BiOp to be unlikely to jeopardize the WDPS or adversely modify its critical habitat. However, section 7 of the ESA is not a one-way ratchet that only goes in the direction of increasing restrictions on fishing. The ESA allows NMFS to tailor fishery restrictions to minimize economic harm, as long as the measures it selects

avoid jeopardy and adverse modification. The Magnuson-Stevens Fishery Conservation and Management Act (“Magnuson-Stevens Act”) requires NMFS to minimize, to the extent practicable, adverse economic impacts on fishing communities consistent with the Magnuson-Stevens Act’s conservation requirements. Moreover, as this Court has noted, the 2010 IFR imposed restrictions with heavy economic impacts, but without the requisite level of public participation.

In ordering NMFS to prepare an Environmental Impact Statement (“EIS”), the Court provided an opportunity for NMFS to work with the North Pacific Fishery Management Council (“NPFMC”) and stakeholders on refining the protective measures, with the benefit of more time, a fuller public process, and more up-to-date scientific information. The design of the 2014 Final Rule, and the analysis of that action in the 2014 BiOp, took into account detailed critiques from several external reviews of the 2010 BiOp. These included three independent peer reviews. In addition, NMFS drew upon significant new scientific data and analyses regarding Steller sea lion movement and foraging, patterns of commercial fishing, and fish stock behavior, abundance, and distribution. Weighing the best available information, the 2014 BiOp reasonably concluded that the 2014 protective measures, when added to the baseline of current conditions and other management measures, were sufficient to make jeopardy or adverse modification unlikely.

Plaintiffs’ challenges to the 2014 BiOp are rife with misstatements and misinterpretations of law and fact. Contrary to Plaintiffs’ arguments, the 2014 BiOp is not arbitrary and capricious simply because NMFS scientists debated controversial and complex issues, and NMFS ultimately exercised its discretion and scientific judgment to choose among competing views. Such agency determinations are entitled to a high level of deference and should not be overturned. Likewise, the NEPA analysis was not deficient in its disclosure of scientific controversy and uncertainty. The Court should reject Plaintiffs’ claims.

STATUTORY AND REGULATORY BACKGROUND

I. The Endangered Species Act

Congress enacted the ESA “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species . . .” 16 U.S.C. § 1531(b). The ESA contains both substantive and procedural requirements designed to conserve endangered and threatened species. 16 U.S.C. § 1531(b).

A. Listing of Threatened and Endangered Species and Designation of Critical Habitat

Congress has directed the Secretaries of the Interior and Commerce (“Secretary”) to list endangered or threatened species.² 16 U.S.C. § 1533. The term “endangered species” includes species which are “in danger of extinction throughout all or a significant portion of [their] range,” while threatened species are “likely to become an endangered species within the foreseeable future throughout all or a significant portion of [their] range.” 16 U.S.C. § 1532(6), (20). The term “species” includes any subspecies of fish or wildlife or plants, and any distinct population segment (“DPS”) of any species of vertebrate fish or wildlife. 16 U.S.C. § 1532(16).

A listed species, subspecies, or DPS is afforded certain legal protections, including restrictions on the conduct of private actors and federal and other government entities. For example, section 9 of the ESA prohibits any illegal or unauthorized “taking” of an endangered animal. 16 U.S.C. § 1538(a)(1).³ In addition, section 7 of the ESA requires each Federal agency to insure that any action authorized, funded, or carried out by the agency “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification” of designated critical habitat. 16 U.S.C. § 1536(a)(2).

To promote conservation of endangered or threatened species, the ESA also authorizes the Secretary to designate certain geographical areas as “critical habitat.” *Id.* § 1533(a)(3). Critical habitat is defined by the ESA to include areas within the geographical area occupied by the species at the time of listing “on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection. . . .” *Id.* § 1532(5)(A)(i). Critical habitat also includes areas outside the geographical area occupied by the species at the time of listing “upon a determination by the Secretary that such areas are essential for the conservation of the species.” *Id.* § 1532(5)(A)(ii).

B. Section 7 Duty to Consult and Avoid Jeopardy and Adverse Modification

Once a species is listed, section 7(a)(2) of the ESA requires each federal agency (“action agency”) to insure, in consultation with the agency with ESA authority over that species (the

² Section 4 divides responsibility for listing species between the Secretary of the Interior, who generally is responsible for terrestrial species and inland fishes, and the Secretary of Commerce, who generally is responsible for marine species. 16 U.S.C. §§ 1532(15), 1533(a)(2). These Secretaries have delegated their responsibilities to the U.S. Fish and Wildlife Service in the case of Interior and to NMFS in the case of Commerce. The Steller sea lion is under the jurisdiction of the Secretary of Commerce.

³ “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19).

“consulting agency”), that any action authorized, funded or carried out by the action agency “is not likely to jeopardize the continued existence” of an endangered or threatened species, or “result in the destruction or adverse modification of [critical] habitat of such species.” 16 U.S.C. § 1536(a)(2). If the agency action will have no effect on a listed species or critical habitat, the consultation requirements are not triggered. 50 C.F.R. § 402.12(d)(1). Here, the action agency was NMFS’s Sustainable Fisheries Division, which manages fisheries and promulgated the 2014 Final Rule, and the consulting agency was NMFS’s Protected Resources Division, which implements conservation programs for marine mammals such as Steller sea lions.

If the action agency determines that its action “may affect” listed species, it must pursue either informal or formal consultation with NMFS. 50 C.F.R. §§ 402.13, 402.14. If either the action or consulting agency determines that the proposed action is “likely to adversely affect” a listed species or its critical habitat, the agencies must engage in formal consultation. 50 C.F.R. §§ 402.13(a), 402.14(a)–(b). Formal consultation typically begins with a written request by the action agency, 50 C.F.R. § 402.14(c), and may include the preparation of a biological assessment by the action agency. 50 C.F.R. § 402.12(a). Formal consultation concludes with the issuance of a biological opinion (“BiOp”) by the consulting agency. 50 C.F.R. § 402.14(l)(1). The BiOp assesses the likelihood of jeopardy to the species and whether the proposed action will result in destruction or adverse modification of critical habitat. *See* 50 C.F.R. §§ 402.14(g), (h).

In preparing its BiOp, NMFS, as the consulting agency, must evaluate the current status of the listed species and critical habitat, and the effects of the action and cumulative effects on the listed species and any designated critical habitat in the action area. 50 C.F.R. § 402.02. If NMFS determines that the action is likely to jeopardize the continued existence of the species or result in an adverse modification of critical habitat, it must determine whether any “reasonable and prudent alternatives” exist for the action that will not violate section 7(a)(2). 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(h)(3). NMFS’s implementing regulations state that the reasonable and prudent alternative (“RPA”) should be one that NMFS believes will avoid the likelihood of jeopardy or adverse modification; can be implemented in a manner consistent with the intended purpose of the proposed action; can be implemented consistent with the scope of the action agency’s legal authority and jurisdiction; and is economically and technologically feasible. 50 C.F.R. § 402.02. During the consultation process, federal agencies are required to proceed based on the “best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2).

C. ESA Recovery Plans

The ESA instructs the Secretary to develop and implement recovery plans for the conservation of listed species unless doing so “will not promote the conservation of the species.” 16 U.S.C. § 1533(f)(1). The ESA defines “conservation” as “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.” 16 U.S.C. § 1532(3); *see also* 50 C.F.R. § 402.02 (defining “recovery”). To the maximum extent practicable, recovery plans must incorporate, among other things, “objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list.” 16 U.S.C. § 1533(f)(1)(B)(ii). A recovery plan is a guidance document, intended to be used as a basic roadmap for the recovery of a species. *See Fund for Animals v. Babbitt*, 903 F. Supp. 96, 103 (D.D.C. 1995).

II. The Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Act, 16 U.S.C. §§ 1801-1883, directs the Secretary of Commerce to conserve and sustainably manage coastal fisheries within the Exclusive Economic Zone⁴ (“EEZ”) to prevent overfishing and rebuild overfished stocks. 16 U.S.C. § 1801(b). The Secretary’s authority under the Magnuson-Stevens Act has been delegated to NMFS. The Magnuson-Stevens Act establishes eight Regional Fishery Management Councils (“Councils”) tasked with preparing Fishery Management Plans (“FMPs”) for their regions. 16 U.S.C. §§ 1801(b)(5), 1852; *see also Alliance Against IFQs v. Brown*, 84 F.3d 343 (9th Cir. 1996); *Kramer v. Mosbacher*, 878 F.2d 134, 135 (4th Cir. 1989). The fishery management councils are quasi-legislative bodies made up of federal, state, and territorial fishery management officials, participants in commercial and recreational fisheries, and other individuals with scientific experience or training in fishery conservation and management. *See* 16 U.S.C. § 1852(b).

Among other things, FMPs set out conservation and management goals for the fishery, and include measures such as permit requirements, closure areas, gear restrictions, and other limitations to carry out such goals. *See id.* at §§ 1853(a)-(b). FMPs and FMP amendments are normally prepared by the Councils, and then submitted to the Secretary, who holds ultimate authority to determine their consistency with the existing FMP and FMP amendments, the Magnuson-Stevens Act, and other applicable law. 16 U.S.C. §§ 1852(h)(1), 1854(a), 1854(c)(2).

⁴ For the most part, states have jurisdiction over fishing in coastal waters within three miles from their coastline, 43 U.S.C. § 1312, while the federal government has jurisdiction over the EEZ, which extends from the boundary of state waters to 200 miles offshore.

Councils may also submit proposed modifications to regulations implementing an FMP to the Secretary. 16 U.S.C. § 1854(c)(2).

FMPs and their implementing regulations must be consistent with ten “National Standards” in the Magnuson-Stevens Act. *See* 16 U.S.C. § 1851(a)(1)-(10). These standards require NMFS to balance often-competing economic, conservation, social, and ecological goals. *See Conservation Law Found. v. Mineta*, 131 F. Supp. 2d 19, 27 (D.D.C. 2001). National Standards 7 and 8 require NMFS to minimize, “to the extent practicable,” the costs of fishery management measures, 16 U.S.C. § 1851(a)(7), and to “minimize adverse economic impacts” on fishing communities to the extent practicable and consistent with the conservation requirements of the statute. 16 U.S.C. § 1851(a)(8). National Standard 1 provides that conservation and management must “prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.” 16 U.S.C. § 1851(a)(1). Overfishing is defined as “a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.” *Id.* § 1802(34). Optimum yield is the amount of fish that “will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems,” and is required to be set on the basis of “maximum sustainable yield” from the fishery, as reduced by relevant social, economic, or ecological considerations. *Id.* § 1802(33)(A); 50 C.F.R. § 600.310(e)(1)(i)(A).

III. National Environmental Policy Act

NEPA, codified at 42 U.S.C. § 4331 et seq., serves the dual purpose of informing agency decision-makers of the environmental effects of proposed federal actions and ensuring that relevant information is made available to the public so that they “may also play a role in both the decision-making process and the implementation of that decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). NEPA’s mandate to agencies is procedural, not substantive, and does not mandate particular results. *Id.* at 350; *Strycker’s Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 227-28 (1980). “NEPA’s goal is satisfied once . . . information is properly disclosed; thus, NEPA exists to ensure a *process*, not to ensure any result.” *Inland Empire Pub. Lands Council v. U.S. Forest Serv.*, 88 F.3d 754, 758 (9th Cir. 1996) (emphasis in original)(citation omitted). NEPA does not require agencies to “elevate environmental concerns over other appropriate considerations.” *Strycker’s Bay*, 444 U.S. at 227. “Other statutes may impose substantive environmental obligations on federal agencies, but NEPA merely prohibits

uninformed – rather than unwise – agency action.” *Methow Valley*, 490 U.S. at 351.

NEPA mandates the preparation of an environmental impact statement (“EIS”) for any major federal action “significantly affecting the quality of the human environment.” *Friends of Southeast’s Future v. Morrison*, 153 F.3d 1059, 1062 (9th Cir. 1998) (citing 42 U.S.C. § 4332(C)). The purpose of NEPA is to assure that agencies give proper consideration to and are aware of the environmental consequences of their actions, *id.*, and that relevant information is made available to the public. *Ctr. for Biological Diversity v. U.S. Forest Service*, 349 F.3d 1157, 1166 (9th Cir. 2003). Once the courts are satisfied that an agency has taken a “hard look” at the environmental consequences, “judicial review is at an end.” *Oregon Natural Res. Council v. Lowe*, 109 F.3d 521, 526 (9th Cir. 1997). A reviewing court may not substitute its judgment for that of the agency concerning the wisdom or prudence of its proposed action. *Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944, 958 (9th Cir. 2003).

A “Rule of Reason” is applied to determine whether an EIS contains a reasonably thorough discussion of the significant impacts of the possible environmental consequences. *Ctr. for Biological Diversity*, 349 F.3d at 1166. As stated in *City of Los Angeles v. Federal Aviation Administration*, 138 F.3d 806, 807 (9th Cir. 1998): “If the agency discusses the main environmental impacts reasonably thoroughly, that’s enough.” This is a “pragmatic judgment” as to whether the form, content, and preparation of an EIS “fosters...informed decision making and informed public participation.” *Churchill County v. Norton*, 276 F.3d 1060, 1071 (9th Cir. 2001). Contrary evidence or scientific uncertainty is not sufficient to render an agency’s EIS inadequate. *Idaho Wool Growers Ass’n v. Vilsack*, 7 F. Supp. 3d 1085, 1090 (D. Idaho 2014). The agency need not respond to every uncertainty, but only significant uncertainty posed to the agency’s decision. *Lands Council v. McNair*, 537 F.3d 981, 1001 (July 2, 2008).

FACTUAL AND PROCEDURAL BACKGROUND

I. The Groundfish Fisheries and the Groundfish FMPs

The Bering Sea and Aleutian Islands (“BSAI”) and Gulf of Alaska (“GOA”) contain some of the most productive waters and fisheries on earth. The major groundfish species targeted in Federal waters include walleye pollock, Pacific cod, sablefish, rockfish, flatfish, and Atka mackerel. Pls.’ Ex. 28, 2014 BiOp at 1054152. Commercial groundfish fisheries in the GOA and BSAI are regulated under a pair of fishery management plans (“Groundfish FMPs”) developed by the North Pacific Fishery Management Council (“NPFMC”). The Groundfish FMPs describe the processes for setting and maintaining annual catch limits, optimum yield, and fair resource

allocation. The BSAI Groundfish FMP and its implementing regulations require that the Council recommends, and NMFS specify, an overfishing level (“OFL”), an acceptable biological catch (“ABC”), and a total allowable catch (“TAC”) for each groundfish stock on an annual basis. Defs.’ Ex. 1, BSAI FMP at 6015344-6015353. The ABC, set below the OFL, accounts for scientific uncertainty to avoid overfishing. The TAC is the annual catch target for a species, derived from the ABC by considering social and economic factors and management uncertainty, and must be lower than or equal to the ABC.⁵ See 79 Fed. Reg. 37,486 (July 1, 2014). The TAC may be further allocated between areas, seasonally, and among types of vessels and sectors. See 79 Fed. Reg. 12,108 (Mar. 4, 2014). The fishery management measures and harvest specifications must be reauthorized annually by January 1. The BSAI Groundfish FMP contains many additional conservation measures, such as extensive area closures to protect essential fish habitat and measures to minimize bycatch to the extent practicable.

II. Steller Sea Lions

A. Steller Sea Lion Biology and Distribution

The Steller sea lion (*Eumetopias jubatus*) is the largest member of the family *otariidae* that includes several species of sea lions and fur seals, also known as “eared seals.” The Steller sea lion’s range extends around the North Pacific Ocean rim from northern Japan, the Kuril Islands and Okhotsk Sea, through the Aleutian Islands and Bering Sea, along Alaska’s southern coast, and south to central California. Pls.’ Ex. 28, 2014 BiOp, at 1027585-86. The Steller sea lion was originally listed as one population under the ESA, but was reclassified into two distinct population segments based on genetic differences between the eastern and western portion of its range. The WDPS, listed as “endangered,” encompasses the area from Russia to the Eastern Gulf of Alaska. The eastern DPS (“EDPS”), once listed as “threatened” but now recovered, stretches from the northeast Gulf of Alaska to California. Defs.’ Ex. 2, 2010 BiOp at 1054239-40. Most adult Steller sea lions occupy rookeries (i.e., sites where pups are born) during the pupping and breeding season, which extends from late May to early July, while most juveniles and non-breeding adults will occupy other sites known as haulouts. *Id.* at 1054240.

Because their reproductive period lasts several months, food supplies near rookeries are particularly important to Steller sea lions. They eat a variety of fishes, squid, and occasionally other marine mammals or birds. *Id.* at 1054266. Diet can vary significantly by season and region,

⁵ Generally, TAC, which is most relevant to actual catch, is below ABC, and ABC is below OFL. In other words, OFL > ABC > TAC.

and may also change in response to changes in prey availability. *Id.* at 1054266-67. Pollock, Pacific cod, and Atka mackerel are believed to be among the most prevalent items in the diet of Steller sea lions in the GOA and BSAI. *Id.* at 1054365. In the Western and Central Aleutian Islands, Atka mackerel is important to the Steller sea lion's diet year-round, while Pacific cod and pollock is more important in winter than summer. Pls.' Ex. 28, 2014 BiOp at 1027634.

B. Steller Sea Lion Population Trends and the Nutritional Stress Hypothesis

Steller sea lion abundance in the WDPS declined sharply from about 220,000 to 265,000 animals in the late 1970s to less than 50,000 in 2000. *Id.* at 1027586. After 2000, the population of the WDPS rebounded, and the current estimated total population size is approximately 79,300 individuals) (27,100 in Russia, 52,200 in Alaska). *Id.* at 1027589-90. By 1991, several likely causes of declines (such as entanglement in fishing gear, and shootings by commercial fishermen) had been all but eliminated. *Id.* at 1027612, 1027602.

Overall, there has also been steady growth for the WDPS as a whole, but mixed population trends at the sub-regional level. From 2000-2012, the overall WDPS population grew at 1.67% per year. Pls.' Ex. 28, 2014 BiOp, Table 3-1, at 1027589. In part as a result of this growth, NMFS's latest population viability studies predict a "virtually nil probability" that the WDPS will go extinct in the next 100 years. *Id.* at 1027600. However, in the Western Aleutians sub-region (Area 543), the trend has been a statistically significant decline of 7.23% per year. *Id.* at 1027589, 1027598. In the Central Aleutian Islands sub-region, the population data shows non-statistically-significant declines of 0.56% per year in Area 542, and statistically significant growth of 2.39% per year in Area 541. *Id.* at 1027592-598. The steep declines in the Western Aleutian Islands (Area 543) create a high risk that this component of the WDPS population will disappear within fifty years. *Id.* at 1027600.

The causes of these mixed population trends remain unexplained. Possible drivers include reduced reproduction due to localized depletion of prey by fisheries; nutritional stress caused by environmental changes that reduce prey availability or prey quality; killer whale predation; and mercury contamination. *Id.* at 1027793-94. As NMFS has stated, "[g]iven the complexity of the dynamic marine environment in the Aleutian Islands, we may never have a firm grasp on the contribution of anthropogenic versus natural causes for population fluctuation in Steller sea lions, including the consequences of variations in prey availability." *Id.* at 1027797.

Studies on Steller sea lions in the 1980s showed evidence of reproductive failure and reduced rates of body growth consistent with nutritional limitation. *Id.* at 1027623. This was also

a period of strong environmental changes associated with a regime shift in the late 1970s, as well as a period of rapid growth in commercial fisheries. Defs.’ Ex. 3, Trites et al. 2007 at 6003950-51. The evidence for nutritional stress being a significant factor was more equivocal in the 1990s and 2000s, since the data no longer showed any reduced body weight or growth, and sea lions in the WDPS were actually found to have better body condition than sea lions in the growing EDPS. Pls.’ Ex. 28, 2014 BiOp at 1027623. Today, “[t]he role of nutritional stress in limiting recovery of the WDPS remains uncertain and the subject of intense scientific debate.” *Id.* at 1027628. If fisheries-induced nutritional stress is occurring at all, it is not likely due to an overall lack of sufficient fish prey in the WDPS as a whole, but rather localized depletions of prey. *Id.* at 1027766 (noting that prior BiOps have “consistently concluded that . . . the amount of prey available on an ecosystem-wide spatial scale and an annual temporal scale is more than needed to meet the food requirements of a recovered Steller sea lion population”); *see also id.* at 1027626, 1027628, 1027761. Thus, “[t]he primary issue of contention is whether fisheries reduce sea lion prey biomass and quality at regional and/or local spatial and temporal scales such that sea lion survival and reproduction are reduced.” *Id.* at 1027612.

III. Steller Sea Lion Protections Under the ESA

A. Pre-2010 ESA Listing Actions and Protective Measures for Steller Sea Lions

NMFS first listed the Steller sea lion as threatened throughout its range in 1990, due to substantial population declines. *See* 55 Fed. Reg. 49,204 (Nov. 26, 1990). NMFS attributed these declines to several factors, including killing of Steller sea lions by commercial fishermen, prey competition from commercial fishing (especially pollock fishing), as well as possible predation of sea lions by killer whales. *Id.* at 49,208-09. Fishing operations had also directly caused the deaths of thousands of sea lions through gear entanglement. *Id.*

In 1997, based on demographic and genetic dissimilarities, NMFS designated two distinct population segments of Steller sea lions: an endangered WDPS and a threatened EDPS. *See* 62 Fed. Reg. 24,345 (May 5, 1997); 62 Fed. Reg. 30,772 (June 5, 1997). The WDPS remains endangered, while the EDPS has since recovered.⁶ In 2003, NMFS designated critical habitat, focused on terrestrial rookery and haulout sites and the areas around such sites that the sea lions use for foraging for prey. *See* 58 Fed. Reg. 45,269 (Aug. 27, 1993).

The first recovery plan for Steller sea lions, issued in 1992, addressed many direct

⁶ NMFS delisted the EDPS due to robust population growth and the removal or reduction of threats. 78 Fed. Reg. 66,140 (Nov. 4, 2013).

impacts of fishing such as shootings, and incidental harm from fishing such as gear entanglement and disturbance near rookeries and haulouts. *See* Pls.’ Ex. 34, Recovery Plan at 6014527. Recovery measures also included reduction of fishing in critical habitat. *See id.* The 1992 Recovery Plan became obsolete, in part because it had been fully implemented. The 2008 revised Recovery Plan recommended continuation of existing or equivalent fishery management measures. *See id.* at 6014530. It also divided the WDPS into seven sub-regions as a basis for monitoring status and extinction risk of the WDPS. *Id.* at 6014528. The Recovery Plan’s criteria for downlisting the species to threatened, or delisting it, require specific population trends in the sub-regions in order to preserve the full geographic range of the WDPS. *Id.* at 6014528. The Recovery Plan’s criteria for downlisting the species to threatened, or delisting it, call for specific trends in all the sub-regions, in order to preserve the full geographic range of the WDPS. *Id.*

Spatial and temporal controls on the commercial harvest of Atka mackerel, Pacific cod, and pollock in the Aleutian Islands have been the subject of several prior BiOps from 1996-2006. Pls.’ Ex. 28, 2014 BiOp at 1027565-66. These have included spatial and temporal management measures to control and disperse harvests, gear restrictions, and a “harvest control rule” for principal prey species when their abundance fell below a specific threshold. Steller sea lion protection measures and biological opinions have also been the subject of several lawsuits.⁷

B. The 2010 Interim Final Rule and Biological Opinion, and Resulting Litigation

In 2010, NMFS completed a new BiOp that concluded that new protective measures were necessary for the fisheries to avoid jeopardy or adverse modification. To implement these new measures in time for the commencement of the 2011 fishing season, NMFS issued them in an Interim Final Rule (“IFR”) without the usual notice and comment procedures. *See* 75 Fed. Reg. 77,535, 77,537 (Dec. 13, 2010). This compressed timeline also precluded extensive NPFMC participation in the development of the 2010 BiOp’s RPA. Defs.’ Ex. 5, NPFMC Letter 4000977-78.

The 2010 BiOp (sometimes called the “FMP BiOp”) found that, in light of “the current decline in the Western Aleutians, as well as the slow decline observed in the Central Aleutian Islands sub-region, the recovery of this DPS is not meeting the criteria in the Revised Recovery

⁷ *See Greenpeace v. NMFS*, 55 F. Supp. 2d 1248 (W.D. Wash. 1999) (“*Greenpeace I*”); *Greenpeace v. NMFS*, 80 F. Supp. 2d 1137, 1152 (W.D. Wash. 2000) (“*Greenpeace II*”); *Greenpeace v. NMFS*, 106 F. Supp. 2d 1066, 1080 (W.D. Wash. 2000) (“*Greenpeace III*”); *Greenpeace v. NMFS*, 237 F. Supp. 2d 1181, 1186-87 (W.D. Wash. 2002) (“*Greenpeace IV*”); *see also infra*, at pages 13-14.

Plan.” Defs.’ Ex. 2, 2010 BiOp at 1054501. The 2010 BiOp found that fisheries-induced nutritional stress could not be ruled out as a cause of such sub-regional declines. NMFS concluded from low pup-to-non-pup ratios in the Western Aleutian Islands than elsewhere that “[t]he most reasonable explanation for the pattern of natality in the Western DPS relative to the eastern DPS is that portions of the Western DPS may be nutritionally stressed” *Id.* at 1054160, 1054505, 1054149. NMFS acknowledged that it was unable to statistically demonstrate a cause-and-effect relationship between fishing and indicators of Steller sea lion nutritional stress, and acknowledged the other factors that could be influencing population trends, including climate changes, shifts in ecosystem productivity, and killer whale predation. *Id.* at 1054428. Thus, NMFS developed its conclusions in the face of “equivocal” evidence using a qualitative, “weight of evidence” approach. *Id.* at 1054508.

The 2010 BiOp included an RPA focused on the areas in the Western and Central Aleutian Island sub-regions (FMP management Areas 541, 542, and 543) that NMFS concluded showed the greatest likelihood of adverse effects due to prey competition with fisheries. The new measures included a complete prohibition on retention of Atka mackerel and Pacific cod in Area 543; additional temporal and spatial restrictions and additional limits on total catch for Pacific cod and Atka mackerel in Area 542; closures of critical habitat within ten nautical miles of rookeries and haulouts for Pacific cod in Area 541; additional gear and temporal restrictions on Pacific cod in Area 541; and closure of the Bering Sea area to directed fishing for Atka mackerel. *See id.* at 1054146-47.

The 2010 IFR imposed significant costs on the fishing industry and associated communities. *See* Defs.’ Ex. 4, 2010 EA at 3075941-42. The State of Alaska and fishing industry plaintiffs filed suit challenging the 2010 IFR and BiOp. This Court ruled largely in NMFS’s favor, rejecting claims that the agency actions violated the ESA, the Magnuson-Stevens Act, or the Regulatory Flexibility Act. *Alaska et al. v. Lubchenco*, No. 3:10-cv-00271-TMB, ECF No. 130 (D. Alaska Jan. 18, 2012), *aff’d* 723 F.3d 1043 (9th Cir. 2013). In affirming the BiOp and IFR, the Court noted that “[i]t is not this Court’s place to supplant NMFS’s scientific judgment with its own,” and that “NMFS is uniquely qualified to make” such assessments. *Id.* at 33. The Court did, however, rule that NMFS violated NEPA by preparing an Environmental Assessment (“EA”) instead of an EIS. *Id.* at 50. The Court did not vacate the BiOp or the IFR based on the NEPA violation, but did order NMFS to prepare an EIS, noting that the regulated communities “stand to suffer large economic and other losses as a result of the fishery restrictions.” *Id.* at 3.

The Court found that “NMFS failed to provide sufficient environmental information for the public to weigh in and inform the agency decision-making process.” *Id.* at 52. In a remedy order, the Court noted that “[t]he harm is exacerbated by the fact that the [fishing] restrictions may continue indefinitely.” *Alaska et al. v. Lubchenco*, ECF No. 142, at 6 (Mar. 5, 2012). The Court stated that the remand would “allow[] the public to play a role in the agency’s decision-making process,” and noted that, as a result of the new NEPA review, the agency “may also have to revisit the IFR.” *Id.* at 5, 9.

IV. The 2012-2014 NEPA Remand and Development of New Fisheries Rule

On March 2, 2012, the court ordered that NMFS issue a final EIS by March 2, 2014, and complete any additional rulemaking prior to the commencement of the 2015 fishing season. *Alaska et al. v. Lubchenco*, ECF No. 142, at 9. The Court extended the deadline to August 14, 2014, based on NMFS’s request to include the NPFMC “in further proceedings regarding the development of new Steller sea lion protection measures.” *Id.* at 4.

On remand, NMFS took pains to ensure that it was undertaking an evaluation of all relevant considerations, even if they exceeded the scope of analysis in the 2010 EA, including two external reviews conducted of the 2010 BiOp. Defs’ Ex. 13, 3153777-3153778. The first review was sponsored by the States of Alaska and Washington and occurred from April through October of 2011. Defs’ Ex. 13 at 3153792; *see also* Defs’ Ex. 8, Bernard et al. at 1044967-1045094. The panel of reviewers consisted of experts in the fields of marine mammals, fisheries science and resource economics. *Id.* at Bernard et al. at 1044967. Their task was to focus solely on support for the conclusions or inconsistencies in the 2010 BiOp. *Id.* The second review was sponsored by NMFS and consisted of an independent peer review by three experts from the Center for Independent Experts (“CIE”) of the science upon which many of NMFS’s management decisions are based (CIE Reviews at 1007018-1007084, 1007667-1007707, 1007742-1007800). Defs’ Ex. 13 at 3153793. These reviewers evaluated the science in the 2010 BiOp and NMFS’s interpretation about the role of the fisheries and other factors affecting Steller sea lion population levels, critical habitat, and recovery. Pls’ Ex. 28, at 1044021. Each of the two reviews called into question NMFS’s jeopardy finding and the basis for NMFS’s cautionary approach under the IFR. *Id.* In addition NMFS also possessed additional data on the Steller sea lions, a more refined method to analyze fishing data, and two years’ worth of fishing data under the IFR. Defs’ Ex. 13 at 3153709.

As a result, NMFS decided against relying entirely upon the old range of alternatives and

analysis, and elected to prepare a new EIS to inform its decision-making. NMFS initiated scoping, the process by which the public is involved in the NEPA process as its initial stages, in April 2012. (77 Fed Reg. 22,750). The scoping period lasted six months as required by the United States District Court of Alaska's court order. *State of Alaska, et al. v. Lubchenko*, ECF No. 142 at 12.

After scoping, the NPFMC and NMFS developed the purpose and need for the proposed action in the EIS. Defs' Ex.13 at 3153779. The purpose of NMFS's proposed action was to implement a suite of protection measures for the AI groundfish fisheries to meet the requirements of the ESA to protect endangered Steller sea lions while also minimizing, to the extent practicable, the economic impact to the fisheries. *Id.*

In April 2013, the NPFMC recommended a preliminary preferred alternative (Alternative 5) for the public's consideration during the review and comment period on the draft EIS. Defs' *Id.* at 3153786. The NPFMC considered recommendations from its Steller Sea Lion Mitigation Committee ("SSLMC"), Scientific and Statistical Committee, Advisory Panel, and public testimony in developing their recommended preliminary preferred alternative for the draft EIS. *Id.* 3153786. NMFS identified the preliminary preferred alternative in the draft EIS and released it for public review on May 17, 2013 (78 Fed. Reg. 29131). Following closure of the comment period, NMFS summarized and responded to all relevant public comments received during the comment period in the Comment Analysis Report, Chapter 13 of the Final EIS ("FEIS"). *Id.* at 3078662-3078768. NMFS published the final EIS on May 23, 2014 (79 Fed. Reg. 29,759; FEIS Volume 1 at 3153679-3153679, FEIS Volume 2 at 3078126-3078126). NMFS issued its Record of Decision in November 2014. Def' Exs. 6.1 & 6.2, ROD at 2001119-2001138.

The FEIS described in detail the six alternatives for the proposed action. Defs' Ex. 13 at 3153845-3153940. These alternatives were developed through a collaborative process with the NPFMC and its SSLMC, and in consideration of public comments received during the scoping process for the EIS and public review of the draft EIS. *Id.* at 3153786. NPFMC and NMFS emphasized that a preferred alternative and any resulting rule must meet the requirements of the ESA before factors that minimize, to the extent practicable, the economic impacts on fishery participants could be considered. *Id.* at 3153845.

NMFS analyzed two broad categories of alternatives. First, under each alternative NMFS analyzed a range of Steller sea lion protection measures in the BSAI that varied among the alternatives. *Id.* at 3153846. Second, under each alternative, NMFS analyzed the effects of

potential fishery research that could be conducted in the BSAI that may affect Steller sea lions. *Id.* at 3153847.

NMFS evaluated a broad range of alternatives ranging from Alternative 6, an alternative that would restrict fishing more than the status quo alternative (Alternative 1), to Alternative 4, the alternative that would allow the most fishing opportunities. *Id.* at 3153845-3153847. Alternative 1 was the measures implemented with the 2010 IFR. *Id.* at 3153846. Alternative 4 would reinstate the Steller sea lion protection measures that were in place prior to the 2010 IFR, with a few exceptions. *Id.* at 315369-3153771. Alternatives 2, 3, and 5 provided more fishing opportunities and fewer protection measures than Alternative 6, but included more protection measures than Alternative 4. *Id.* To provide a comprehensive analysis of the effects of the alternatives, the FEIS compares the six alternatives relative to each other and relative to a baseline period used to assess the environmental conditions affecting Steller sea lions (generally from 2004 through 2010). *Id.*

In October 2013, NPFMC recommended Alternative 5 which provided more fishing opportunities and fewer protection measures than Alternative 6, but included more protection measures than Alternative 4. *Id.* NPFMC's recommendation was based on the analysis in the draft EIS, public comments, and the best available scientific information including the external scientific reviews conducted by the Center for Independent Experts on behalf of NMFS and the panel convened by the States of Alaska and Washington (79 Fed. Reg. 37,491-37,492, Defs' Ex. 13 at 3153846). NPFMC determined that Alternative 5 would protect specific areas that are important to Steller sea lions, and include specific harvest limits on the amount of fishing within critical habitat in order to protect Steller sea lion prey availability. Defs' Ex. 6.2 at 2001134. Alternative 5 maintains a careful approach to fishing for Steller sea lion prey species in critical habitat by spatially and temporally dispersing catch to prevent localized depletion of these important prey resources. *Id.* at 2001134.

NPFMC determined that Alternative 5 would minimize economic impacts on fishery participants (79 Fed. Reg. 37491-37492). "The EIS found that the direct, indirect, and cumulative effects of Alternative 5 on the human environment, including Steller sea lions, were similar to those effects under Alternative 1 with the exception that Alternative 5 would enhance fishing opportunities and minimize potential economic impacts." Defs' Ex. 6.2 at 2001134. The EIS indicates that additional restrictions on fisheries beyond those considered under Alternative 5 (e.g., Alternatives 1 and 6) may result in additional economic harm to participants in the

regulated fisheries, and would not meet the secondary objective of the proposed action. *Id.* at 2001133. NMFS published the proposed rule to implement the Alternative 5 Steller sea lion protection measures on July 1, 2014, with public comment ending on August 15, 2014. (79 Fed. Reg. 37,486). NMFS published the final rule on November 25, 2014. (79 Fed. Reg. 70,286-70,338).

V. The 2014 Final Rule

The 2014 Final Rule is designed to limit and spatially and temporally disperse fishing to reduce competition between Steller sea lions and Atka mackerel, Pacific cod, and pollock fisheries for prey resources. Space does not permit a comprehensive description of the measures in the 2014 Final Rule, but in a nutshell, the goal is to enhance fishing opportunities, while still protecting Steller sea lions prey resources and complying with the ESA's requirement to avoid jeopardy and adverse modification. *See* 79 Fed. Reg. at 70,287; Defs.' Ex. 6, Record of Decision 2001123. Dispersal of fishing is accomplished through closure areas, harvest limits, seasonal apportionment of harvest limits and limits on fishery participation. 79 Fed. Reg. at 37,486. The 2014 Final Rule closes ninety percent of Atka mackerel critical habitat to mackerel fishing. 79 Fed. Reg. at 70,288. Twenty-two percent of critical habitat in the Aleutian Islands will be closed to Pacific cod fishing with non-trawl gear, and fifty-two percent of critical habitat in the Aleutian Islands is closed to Pacific cod fishing with trawl gear. 79 Fed. Reg. at 70,289. Starting in January 2014, in a separate management action, NMFS separated Aleutian Islands Pacific cod from the Bering Sea Pacific cod stock, which will significantly reduce Pacific cod harvest in the Aleutian Islands. 79 Fed. Reg. 70,306. The 2014 Final Rule closes sixty-five percent of critical habitat in the Aleutian Islands to pollock fishing. 79 Fed. Reg. at 70,289. Pollock fishing will be barred in ninety-five percent of critical habitat in the more sensitive Western Aleutian Islands (Area 543). *Id.*

For all three fisheries, the 2014 Final Rule focuses closures on important foraging areas in proximity to rookeries or haulouts. For example, it prohibits directed trawl for Atka mackerel in waters from 0-3 nm from haulouts and 0-10 nm from rookeries in Areas 543 and 542, and prohibits Atka fishing from 0-20 nm from haulouts and rookeries in some areas of Area 542. *Id.* In Area 541, it prohibits directed Atka mackerel trawl inside critical habitat except for a portion of critical habitat around Seguam island. *Id.* The 2014 Final Rule also enacts seasonal and area-based harvest limits to temporally and spatially disperse harvest. For example, Atka mackerel harvest will be limited to sixty-five percent of the Area 543 ABC, and no more than sixty percent

of annual TAC may be caught in critical habitat. 79 Fed. Reg. at 70,289-90. The 2014 Final Rule also includes a cap on the amount of the Pacific cod ABC that may be taken in Area 543. *Id.* Pollock catch will be temporally dispersed by seasonal limits, with the “A season” pollock harvest (January through April) limited to five percent of the ABC in Area 543; fifteen percent in Area 542, and thirty percent in Area 541. *Id.* The 2014 Final Rule works together with other management measures already in effect. Thus, the existing harvest control rule would automatically prohibit harvest for pollock, Pacific cod, and Atka mackerel if spawning biomass fell too low. 50 CFR § 679.20(d)(4). Also in effect are limits on the size of vessels that may catch pollock, and a very limited TAC (19,000 mt) for pollock. 79 Fed. Reg. at 70,294. As further described below, the 2014 Final Rule opens some formerly closed areas to fishing, but the 2014 BiOp found that the 2014 Final Rule’s implementation was not likely to cause prey competition that would have any significant impacts on Steller sea lion populations or sub-populations.

VI. The 2014 Biological Opinion

In May 2013, NMFS’s Sustainable Fisheries Division requested re-initiation of formal consultation under ESA section 7, on Alternative 5, the preferred alternative. Pls.’ Ex. 28, 2014 BiOp, at 1027567-568. NMFS completed the 2014 BiOp on April 2, 2014. The 2014 BiOp considered the 2010 BiOp to remain valid as the overarching BiOp for the BSAI groundfish fisheries as a whole, including effects of the fisheries on ESA-listed whales. *Id.* at 1027569; 79 Fed. Reg. at 70,296. Regarding Steller sea lions, the 2014 BiOp maintained the 2010 BiOp’s emphasis on the effectiveness of measures to temporally and spatially disperse fisheries to prevent nutritional stress from localized prey depletions. Like the 2010 BiOp, it also focused on determining whether such measures avoided significant population-level effects, at both the WDPS level and the level of sub-regions identified by the Recovery Plan. After carefully considering a vast amount of scientific information, the 2014 BiOp reasonably concluded that the action was not likely to jeopardize the continued existence of the WDPS, or to destroy or adversely modify its designated critical habitat. Pls.’ Ex. 28, at 1027801.

A. Scientific Uncertainty and Precautionary Approach of the 2014 BiOp

The 2014 BiOp reflected a cautious approach that resolved fundamental scientific uncertainties in favor of the listed species. Whether fisheries-induced stress plays a role in explaining Steller sea lion population trends is intensely debated. In fact, three independent peer reviews of the 2010 BiOp all called into question NMFS’s reliance on this hypothesis. Pls.’ Ex.

28, 2014 BiOp at 1027561-64. As the 2014 BiOp noted:

NMFS has no direct evidence that Steller sea lions are experiencing nutritional stress in the western and central Aleutian Islands However, the western Aleutian Islands population continues to decline at a steep, significant rate, the central Aleutian Islands population is decreasing slightly at a non-significant rate . . . and important data gaps hinder our ability to rule out . . . effects of fishing, as contributing to the continued decline in the western Aleutian Islands and the lack of recovery in the central Aleutian Islands Given these important data gaps, NMFS maintains that a cautionary approach to fishing for prey species in Steller sea lion critical habitat is warranted, especially in winter when we have the least information about biomass, and that catch should be dispersed in time and space to prevent localized depletion— at least until such time as we have better local biomass and exploitation rate estimates.

Id. at 1027778. In other words, in spite of the equivocal evidence that fishery-induced nutritional stress is a factor affecting the WDPS, NMFS maintains a highly precautionary approach to its management of Steller sea lions and the fisheries and assumes that it could be a factor.

B. The 2014 BiOp’s Framework for Considering Jeopardy and Adverse Modification

The 2014 BiOp explained that jeopardy means “to reduce appreciably the likelihood of” survival or recovery of the species. *Id.* 1027791-92. The “adverse modification” inquiry focused on “whether affected designated critical habitat is likely to remain functional (or retain the ability to become functional) to serve the intended conservation role for the species.”⁸ *Id.* at 1027792. As in the 2010 BiOp, NMFS addressed “whether the fisheries as prosecuted under the proposed action are likely to result in spatial and temporal depletions of prey in areas and times that are important to sea lions, with an emphasis on animals with the highest anticipated food requirements—nursing, pregnant adult females in winter and spring.” *Id.* at 1027767.

NMFS noted that “if it were not for the continued, significant declines in Steller sea lion abundance in the Western Aleutian Islands, the WDPS would be on the path to recovery.” *Id.* at 1027797. However, the 2008 Recovery Plan’s recovery criteria call for avoiding the loss of any of the Area populations. Like the 2010 BiOp, the 2014 BiOp acknowledges these recovery criteria as “the basis from which to gauge the risk of extinction for the WDPS and compose the

⁸ Regarding the jeopardy standard, NMFS relied upon the definition at 50 C.F.R. § 402.02, but noted it was interpreting the definition to require analysis of both likelihood of survival and the likelihood of recovery, consistent with *National Wildlife Federation v. NMFS*, 524 F.3d 917 (9th Cir. 2008). NMFS noted that it would not rely on the regulatory definition of “destruction or adverse modification” at 50 C.F.R. § 402.02, in light of the invalidation of that definition in *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004).

core standards upon which a decision to remove the WDPS for the Endangered Species List will be based.” *Id.* at 1027597. Thus, NMFS determined that it would find jeopardy or adverse modification if the fisheries caused localized depletions of prey large enough to “reduce the survival or recovery of any sub-population (sub-region) [of the WDPS],” and in particular would find jeopardy or adverse modification if the “proposed action is likely to affect the survival or recovery of the WDPS of Steller sea lions by affecting the population growth rate of the Western Aleutian Islands or Central Aleutian Islands sub-population.” *Id.* at 1027797.⁹

C. New Information Considered in the 2014 BiOp

The 2014 BiOp benefitted from many new sources of information not available for the 2010 BiOp, including several external reviews of the 2010 BiOp and RPA, which resulted in NMFS carrying out new studies. *See* Defs.’ Ex. 7, BiOp Presentation to NPFMC, at 4004068-4004138 (describing new information in BiOp). The external expert review panel commissioned by the States of Alaska and Washington to review the 2010 BiOp urged NMFS to provide a fuller presentation of data on overlap between commercial fishing and Steller sea lion foraging, in terms of time, location, depth, and prey size. Pls.’ Ex. 28, 2014 BiOp at 1027560; Defs.’ Ex. 8, Bernard et al. at 1044967-1045094. Bernard et al. also criticized the 2010 BiOp’s reliance on the ratio of pups to non-pups as an indicator of reproductive rates, arguing that there were too many confounding variables for this to be a reliable indicator. Pls.’ Ex. 28, 2014 BiOp at 1027560. Three independent peer reviewers chosen by the CIE questioned the reliability of using the ratio of counts of pups to non-pups as a proxy for Steller sea lion natality or evidence of nutritional stress, arguing that it was not a reliable measure. Defs.’ Ex. 9 (Bowen 2012, 1007018-1007084); Defs.’ Ex. 10 (Stewart 2012, 1007667-1007707); Defs.’ Ex. 11 (Stokes, 1007742-1007800). The CIE reviewers also questioned the 2010 BiOp’s conclusion that fisheries-induced nutritional stress could explain Steller sea lion population trends, finding that the evidence suggested that fisheries-induced nutritional stress was unlikely and unsupported. *Id.*; Pls.’ Ex. 28, 2014 BiOp at 1027562. Bernard et al. stated similar concerns. *Id.* at 1027560-61.

In response to the external reviews, NMFS scientists completed studies to refine WDPS population growth rate estimates and characterize uncertainty in the estimates (Defs.’ Ex. 17, 6004235-6004254); to improve descriptions of sea lion at-sea habitat use in the Western and

⁹ Because the main feature of critical habitat for Steller sea lions is prey availability, the criteria and evidence considered in the jeopardy and adverse modification analyses were very similar. In some instances, for brevity, this brief will refer to both analyses as concerning “jeopardy.”

Central Aleutian Islands (Defs.' Ex. 12, 6012667-6012685); to evaluate correlative analyses between fishery removals and sea lion trends (Defs.' Ex. 21, 6037104-6037154); and to evaluate the suitability of pup to non-pup ratios as a proxy for sea lion natality (Defs.' Ex. 16, 6012538-6012556). The 2014 BiOp used new science on: Steller sea lion diet (Defs.' Ex. 18, 6015765-6015843); Steller sea lion survival rates (Defs.' Ex. 19, 6019162-6019201); Steller sea lion predation mortality (Defs.' Ex. 22, 6012256-6012265); Steller sea lion movements between WDPS and EDPS ranges (Defs.' Ex. 23, 6012518-6012531); local pollock harvest rates in the Bering Sea (Defs.' Ex. 20, 6010346-6010359); fine-scale prey biomass estimates in the Western and Central Aleutian Islands (Defs.' Ex. 24, 6011392-6011443); susceptibility of specific areas to localized depletion of Atka mackerel (Defs.' Ex. 25, 6025937-6025967); Steller sea lion metabolic rates (Defs.' Ex. 26, 6012266-6012274); and a correlative study on effects of local prey biomass on sea lion population trends (Defs.' Ex. 27, 6002912-6003025).

This new science confirmed that pup-to-non-pup ratio may be an erroneous proxy for natality, and NMFS concluded that it would not rely on that indicator in the 2014 BiOp. Pls.' Ex. 28, 2014 BiOp at 1027609-10. NMFS also extensively re-examined available studies and data on the fisheries-induced nutritional stress hypothesis and competing hypotheses for sea lion population trends, such as killer whale predation, environmental contaminants, and environmental regime change. *See Id.* at 1027646. NMFS concluded that “[t]he prevalence of nutritional stress in the WDPS today is unknown,” but that “[m]ost of the available evidence is either counter to or non-supportive of a nutritional stress mechanism to explain the apparent population dynamics for the WDPS.” *Id.* at 1027628.

In the 2000, 2001, 2003, and 2010 biological opinions, NMFS used satellite telemetry data from tagged sea lions to “define important Steller sea lion foraging areas and design measures to reduce the spatial and temporal overlap with the fisheries.” *Id.* at 1027685. In the 2010 BiOp, NMFS enhanced this data with “opportunistic” sea lion sighting data (a.k.a., “Platform of Opportunity,” “Platform,” or “POP” data). In its effects analysis, the 2014 BiOp likewise used such methods to analyze sea lion foraging behavior, but with the benefit of improved data and techniques. In the 2010 BiOp, the telemetry analysis (Defs.' Ex. 28, 6008741-6008761) did not include *any* tagged sea lions from the Western and Central Aleutian Islands, relying on data from three juvenile males tagged in more eastern regions. In 2014, by contrast, NMFS possessed, for the first time, data from six tagged adult female sea lions in the Western and Central Aleutian Islands in 2011 and 2012. Pls.' Ex. 28, 2014 BiOp at 1027690-691); Defs.'

Ex. 12, Lander et al. 2013 at 6012667-6012685.

In 2014, NMFS also used a new database and analyses of historical fishing patterns to improve upon the inferences drawn in the 2010 BiOp regarding the locations and timing of fishery harvests. Pls.’ Ex. 28, 2014 BiOp at 1027707, 1027741. In addition, NMFS employed new analyses of the distribution and movements of Atka mackerel, based on groundfish trawl survey data analyzed by NMFS’s Fishery Interaction Team (a.k.a. “FIT” data). *Id.* at 1027771-74, 1027779.

D. The 2014 BiOp’s Qualitative, Holistic Approach

Management of the fisheries to protect Steller sea lions has always required NMFS to make judgment calls based on imprecise information about how fisheries and sea lions interact and what factors might affect sea lion population trends. *Id.* at 1027777. Considerable effort has been exerted to reduce these uncertainties. Between 1992-2011, \$241 million was spent on research directed toward understanding the causes of the Steller sea lions’ decline and lack of recovery. Defs.’ Ex. 13, FEIS at 3160431. The 2014 preferred alternative includes more research. Nevertheless, “[g]iven the complexity of the dynamic marine environment in the Aleutian Islands, we may never have a firm grasp on the contribution of anthropogenic versus natural causes for population fluctuation in Steller sea lions, including the consequences of variations in prey availability.” Pls.’ Ex. 28, 2014 BiOp at 1027797. Thus, NMFS necessarily took a qualitative, holistic approach to examining causal relationships between fishing and sea lion populations, as it had in the 2010 BiOp: “[t]he purpose of the analysis is to determine whether appreciable reductions [in prey availability] are reasonably expected, but not to precisely quantify the amount of those reductions.” *Id.* at 1027793. This qualitative, holistic approach was not new: “Our [ESA] section 7 risk analyses have always been hampered by incomplete data to understand these interactions.” *Id.* at 1027777; *see also* Defs.’ Ex. 13, FEIS at 3160431 (noting that NMFS “uses a weight-of-evidence approach to determine if a plausible pathway exists between the effects of the action and the condition of an ESA-listed species or its critical habitat to determine if mitigation may be warranted”)

The 2014 BiOp of necessity analyzes different aspects of the problem with different levels of precision. NMFS could with more precision analyze where and when the fisheries catch which kinds and sizes of fish, but could not as precisely quantify localized fish abundance or exploitation rates (i.e., the amount of harvest relative to amount of available biomass in specific areas such as critical habitat). Pls.’ Ex. 28, 2014 BiOp at 1027777. Moreover, “[d]ata gaps,

including extremely limited winter biomass information, hinder our ability to measure prey distribution and abundance at the temporal and spatial scales important to individual Steller sea lions.” *Id.* at 1027778. NMFS also acknowledged it lacked “a complete understanding of Steller sea lion energetic requirements and foraging behavior.” *Id.* NMFS possessed improved data on locations of sea lion foraging, but “more samples of weaned juveniles and adult females are needed in summer and winter to improve our understanding of their at-sea habitat use from which we infer foraging.” *Id.* at 1027777. Accordingly, a simple, quantifiable test for jeopardy was a scientific impossibility: “[t]he purpose of the analysis is to determine whether appreciable reductions are reasonably expected, but not to precisely quantify the amount of those reductions.” *Id.* at 1027568. Nor would NMFS be able to “quantify the absolute amount of reduction or the resulting population characteristics ([sea lion] abundance, for example) that could occur as a result of implementing the proposed action.” *Id.* at 1027793.

E. 2014 BiOp’s Analyses of the 2014 Final Rule’s Effects

The 2014 BiOp considered the best available science, including new data, to determine whether the three fisheries were likely to cause localized depletion of sea lion prey, with an emphasis on areas important to foraging adult females in winter and spring. *Id.* at 1027795.

1. *The 2014 BiOp’s Analysis of Atka Mackerel Fishery Impacts*

The limited action area in the 2014 BiOp relative to 2010 allowed NMFS “to conduct a more in-depth analysis of the spatial and temporal distribution of the Atka mackerel harvest” in Areas 543, 542, and 541. *Id.* The discussion of the Atka mackerel fishery weighed many factors, including: effects of the management measures on catch; new studies of Atka mackerel distribution and movements; the effectiveness of trawl-exclusion zones for preserving Atka mackerel for sea lions; historical spatial and temporal distribution of the fishery; and improved data regarding which areas are most important to Steller sea lion foraging, based upon—but improving—methods used in the 2010 BiOp. Such factors in combination would “substantially decrease the likelihood that the proposed Atka mackerel fishery in Area 543 will reduce the numbers or reproduction of the Western Aleutian Islands sub-population of the WDPS.” *Id.*

NMFS determined that the proposed Atka mackerel fisheries were not likely to result in localized depletions of prey in sea lion critical habitat. The 2014 Rule would keep 90% of critical habitat in the Aleutian Islands closed to Atka mackerel fishing. 79 Fed. Reg. 70,288. Historical

fishing patterns revealed that only a small proportion of catch was taken inside critical habitat in winter. Pls.' Ex. 28, 2014 BiOp at 1027778. Only a few vessels are expected to participate in the fishery (and these vessels are in a catch-share program so they do not race for fish); and Atka mackerel ABCs are specified for each Area which further disperses harvest in space. *Id.* at 1027744, 1027795. The action included several new harvest limits to disperse Atka mackerel catch in time and space in Area 543, the most sensitive area. *Id.* at 1027795. Although portions of Area 543 will be opened to fishing, the Atka mackerel harvest will be limited to sixty-five percent of the Area 543 ABC, and no more than sixty percent of annual TAC may be caught in critical habitat. 79 Fed. Reg. at 37,493. The seasonal TAC apportionments mean that a maximum of twenty percent of the Area 543 ABC can be harvested inside critical habitat in each season. Pls.' Ex. 28, 2014 BiOp at 1027795. In combination with the extensive area closures, NMFS determined that the Area 543 Atka mackerel fishery was not likely to cause localized depletions in important sea lion foraging areas. *Id.* at 1027779.

NMFS also considered new analyses of the locations and intensity of Atka harvest to assess the effects of the management measures. Such data show that even where critical habitat will be open to fishing, the actual areas and harvests expected to occur are often quite limited. *See, e.g., id.* at 1027710 (Fig. 5-8, showing limited overlap between areas actually fished for winter Atka harvest and areas to be opened in Area 543); 1027743 (Fig. 5-30, showing limited extent of Atka harvest in Area 543 critical habitat in Winter under pre-2011 closures); 1027795 (noting that when these areas were opened before, the majority of the Area 543 harvest occurred outside of critical habitat and was distributed fairly evenly between summer and winter). In addition, much of the Atka mackerel habitat in the Aleutian Islands is simply not amenable to bottom-trawl fishing at all. *Id.* at 1027779.

The 2014 Final Rule allows some Atka mackerel and Pacific cod fishing in areas outside critical habitat in Area 543 that were closed in the 2010 IFR. But in 2014 NMFS had new data indicating that such closures were not supported by the best available evidence. NMFS has long used Steller sea lion telemetry tracking data (ever since the 1992 Recovery Plan) to draw inferences about general patterns of sea lion foraging. *Id.* at 1027685. For the 2000, 2001, and 2003 BiOps, NMFS found these data showed that areas outside of critical habitat in Area 543 were less important to foraging than areas within critical habitat. *Id.* at 1027686, 1027693,

1027778. Consequently, NMFS had allowed fishing in the larger areas outside critical habitat, where catch, fish, and sea lion foraging would be more dispersed. *Id.* at 1027686; *see also Greenpeace IV*, 237 F. Supp. 2d 1181, 1196 (W.D. Wash. 2002). In the 2010 BiOp, the data seemed to point to a new conclusion. The 2010 analysis considered six sea lions tracked in the Western and Central Aleutian Islands, and *all* of their observed locations were outside of ten nm from haulouts and rookeries, with only one data point within twenty nm of a rookery or haulout. Pls.’ Ex. 28, 2014 BiOp, Table 5-5 at 1027689. Thus, the 2010 RPA departed from prior practice and closed areas outside critical habitat. *Id.* at 1027795. But in 2014, NMFS considered the issue anew with the benefit of more reliable data from adult female sea lions tagged in the Western and Central Aleutian Islands. *Id.* at 1027692. The new data showed a very different pattern: nearly all tracked locations were *inside* critical habitat: on average about 80.6% of winter and 92.3% of summer telemetry locations of adult females were inside critical habitat. *Id.* at 1027692. Based on the new information, NMFS concluded, as it had in earlier BiOps, that the fisheries were not likely to compete with sea lions for prey outside of critical habitat in Area 543, and that the 2010 RPA’s closures of such areas were no longer supported by the best available data. *Id.* at 1027693, 1027778.

New analyses of trawl survey data from NMFS’s Fishery Interaction Team (“FIT”) provided further insights about specific areas that are and are not susceptible to localized depletion of Atka mackerel in Areas 541 and 542. As a result, the 2014 Final Rule closed additional areas that were open under the action analyzed in the 2010 BiOp. *Id.* at 1027779-80). For example, in Area 542, the BiOp found, based on the FIT studies, that the 2014 Final Rule’s expanded closures around Amchitka Island South were important to preserve Atka mackerel for sea lions, because fish biomass was low in the area and Atka mackerel tended to move from inside to outside the existing trawl exclusion zone where they would be vulnerable to a fishery if there were one. *Id.* at 1027773.

In addition, 92% of critical habitat is closed to Atka mackerel fishing in Area 542. *Id.* at 1027779. NMFS found that the areas to be closed to Atka mackerel fishing inside of three nm from haulouts and ten nm from rookeries in Area 542 were effective at preserving Atka mackerel for sea lions. *Id.* at 1027773, 1027779. As a result, NMFS concluded the Atka mackerel fishery

in Area 542 was unlikely to cause localized depletions. NMFS applied the same logic for the small area of critical habitat to be open in Area 541. The 2014 Final Rule opens critical habitat in Area 541 for the first time since 2003 based on new FIT research and other information confirming a low danger of localized depletion in the area to be opened. *Id.* at 1027780.

2. *The 2014 BiOp's Analysis of Pacific Cod Fishery Impacts*

The 2014 Final Rule will open 22-23% more Pacific cod critical habitat in the Aleutian Islands to fishing. 79 Fed. Reg. 70,289. However, as with Atka mackerel, a consideration of many factors, including both continuing and new fishery management measures, and new information on fishing and sea lions, led NMFS to reasonably conclude that the 2014 Final Rule was not likely to cause localized depletions of Pacific cod. *Id.* at 1027796. An important factor in the 2014 BiOp is a major change NMFS made in the management of the Pacific cod fishery subsequent to the 2010 IFR. NMFS split the ABC and TAC between the Aleutian Islands and the Bering Sea, a change expected to cut Aleutian Island Pacific cod harvests by 72%. The 2014 Final Rule also includes a cap on the amount of the Pacific cod ABC that may be taken in Area 543. *Id.* at 1027750-51. Based on an analysis of the new limits on harvest, in combination with historical Pacific cod fishing patterns, the BiOp concluded that Pacific cod harvests in Area 543 will resemble harvests under the 2010 IFR, and similarly not result in localized depletions. *Id.* at 1027781-82. Historically, even before the reduction in allowable catch, the great majority of Pacific cod was caught in Areas 541-542. *Id.*, Table 5-41 at 1027754. And NMFS's new analysis of expected fishing patterns showed that most of the Pacific cod harvest under the 2014 Final Rule will likely be caught in Area 541, where sea lion populations are growing steadily. *Id.* at 1027781-82.

The 2014 Final Rule also opens areas outside critical habitat to Pacific cod harvest, but NMFS's review of historical fishing patterns shows that prior to the imposition of such closures, all of the Pacific cod harvest in Area 543 was actually taken inside critical habitat, not outside. *See id.*, Figs. 5-35, 5-39, at 1027753, 1027756. Moreover, as discussed above, the 2014 BiOp's analysis of new telemetry and Platform data indicated that the rationale for imposing those closures in 2010 was no longer supported by the best available data on sea lion movements and habitat usage. *See Part E.1 at page 24-25, supra.*

3. *The 2014 BiOp's Analysis of Pollock Fishery Impacts*

The Aleutian Islands have been closed to directed harvest of pollock since 1999. Under the 2014 action, 65% of critical habitat will remain closed to pollock fishing in the Aleutian Islands, while 35% will be open. *Id.* at 1027758-1027760. Pollock fishing will be barred in ninety-five percent of critical habitat in the more sensitive Western Aleutian Islands (Area 543). *Id.* at 1027784. Pollock harvests will be modest in size, because the only directed pollock fishing allowed in the entire Aleutian Islands consists of Congressional allocation to the Aleut Corporation and associated quota holders, under which the entire Aleutian Islands pollock TAC is limited to a maximum of 19,000 mt. *Id.* at 1027758-1027760. As a point of comparison, the 2008 TAC for pollock in the Bering Sea was one million mt. Defs.' Ex. 2, 2010 BiOp at 1054341.

Furthermore, fifty percent of this Aleutian Islands pollock TAC must be harvested by trawl catcher vessels less than sixty feet in length, slowing the rate of harvest and making areas inaccessible that only larger vessels could target. Pls.' Ex. 28, 2014 BiOp at 1027795. This pollock catch will also be temporally dispersed by seasonal limits, with the "A season" pollock harvest (January through April) limited to five percent of the ABC in Area 543; fifteen percent in Area 542, and thirty percent in Area 541. 79 Fed. Reg. 37,494, 496. The proposed action would maintain the existing closure of pollock fishing from November 1 through January 20. *Id.* at 1027784. The global harvest control rule would further ensure against depletion of pollock stocks. The 2014 BiOp found that the statutory and other constraints on the fishery indicate that the actual harvest is likely to be significantly less than the already very limited TAC. *Id.* at 1027759.

Nevertheless, unlike the other fisheries, NMFS found there was some potential for limited localized depletion of pollock, in part because biomass is at relatively low levels currently in the Aleutian Islands, and fishing is temporally compressed. *Id.* at 1027784-86. The 2014 BiOp anticipated that this would likely be mitigated to some extent because sea lions appear to forage mainly at shallower depths than pollock trawls, particularly in Area 543, and thermal barriers may limit pollock's vertical movements in winter. *Id.* at 1027783. *See also* pages 35-37, *infra*. Localized depletions, if they occurred, would not likely last more than a week

or so, due to high horizontal movement rate of pollock, allowing any local depletion to be quickly replenished. *Id.* at 1037784. Overall, in light of the many mitigating factors, such temporary localized depletions, if they occurred, were not expected to have serious consequences for the WDPS as a whole. *Id.* at 1027796.

4. *The 2014 BiOp's Jeopardy Conclusions*

In light of all these factors, NMFS did “not expect that the proposed fisheries are likely to appreciably reduce the survival or recovery of the Western Aleutian Islands Steller sea lion sub-population.” *Id.* at 1027798. NMFS found, with respect to Area 542, that the “proposed action would likely be more protective for Steller sea lions than the [2010 IFR],” due to factors such as the greatly reduced Pacific cod harvest and the effects of the new area closures for Atka mackerel. *Id.* The effects of the proposed fisheries were “expected to be similar to the fisheries from 2004-2010 in Area 541, a period with apparent increases” in sea lion populations in that Area. *Id.* at 1027799. In Area 543, population-level adverse effects were also not likely, due to factors such as area closures, measures to spatially and temporally disperse Atka harvest, and limits that would mean relatively small harvests for Pacific cod and pollock. *Id.* NMFS acknowledged that the longstanding “decline in numbers of the western Aleutian Islands sub-population is likely to continue for unknown reasons, even apart from any changes in the fisheries,” but found that “the proposed measures are unlikely to yield population level effects that would appreciably change the likelihood of survival or recovery of the western Aleutian Islands sub-population.” *Id.*

STANDARD OF REVIEW

Final actions by an administrative agency are subject to limited judicial review in accordance with the Administrative Procedure Act (“APA”), 5 U.S.C. § 701 *et seq.* 16 U.S.C. § 1855(f)(1); 5 U.S.C. § 706(2)(A)-(D). Under the APA, the standard for judicial review of an action by NMFS is whether the action was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971). A reviewing court should determine agency compliance with the law solely on the record on which the decision was made. *Florida Power & Light Co. v. Lorion*, 470 U.S. 729, 743-744 (1985). In reviewing the reasonableness of the agency action, “due account shall be taken of the rule of prejudicial error.” 5 U.S.C. § 706(2).

Under the APA standards of review, the agency decision is “entitled to a presumption of regularity.” *Overton Park*, 401 U.S. at 415. The court’s only function is to determine whether the Secretary “has considered the relevant factors and articulated a rational connection between the facts found and the choice made.” *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 105 (1983) (citation omitted). A reviewing court “is not to substitute its judgment for that of the agency,” and should “uphold a decision of less than ideal clarity if the agency’s path may reasonably be discerned.” *FCC v. Fox Tel. Stations*, 556 U.S. 502, 513-14 (2009) (quoting *Bowman Transp., Inc. v. Arkansas-Best Freight System, Inc.*, 419 U.S. 281, 286 (1974)). An agency’s interpretation of an ambiguous statute is entitled to deference as long as it is a “permissible interpretation.” See *Chevron U.S.A. v. Natural Res. Def. Council*, 467 U.S. 837, 842-43 (1984); *United States v. Mead Corp.*, 533 U.S. 218, 226-27 (2001).

Where, as here, the agency’s technical expertise is involved, the court defers to the agency’s expertise. *FCC v. Nat’l Citizens Comm. for Broad.*, 436 U.S. 775, 813-18 (1978). A reviewing court “must generally be at its most deferential” when the agency is “making predictions, within its area of special expertise, at the frontiers of science.” In such situations, this court is to “defer to the agency’s interpretation of equivocal evidence, so long as it is reasonable.” *Central Arizona Water Conservation Dist. v. EPA.*, 990 F.2d 1531, 1540 (9th Cir. 1993) (quoting *Natural Res. Def. Council v. EPA*, 902 F.2d 962, 968 (D.C. Cir. 1990), and *Baltimore Gas & Elec. Co.*, 462 U.S. at 103). In the face of conflicting scientific opinions, “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.” *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989). An agency has considerable discretion in determining what constitutes the “best available data” in the ESA context. See *Ecology Ctr. v. Castaneda*, 574 F.3d 652, 659 (9th Cir. 2009). The ESA “best available data” requirement “merely prohibits [an agency] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on.” *Kern County Farm Bureau v. Allen*, 450 F.3d 1072, 1080 (9th Cir. 2006) (quotation omitted, alterations in original).

ARGUMENT

Plaintiffs fail to meet their burden of showing that NMFS’s analyses and conclusions in the 2014 BiOp were “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2). The ESA required NMFS to reach conclusions about the impacts of fisheries in a vast, highly complex ecosystem, in the face of significant scientific uncertainty.

As one court noted, “[t]he North Pacific ecosystem poses complex scientific and management issues, to which there are no easy answers.” *Greenpeace*, 55 F. Supp. 2d at 1269. And as this Court has noted, NMFS’s “resolution of [] scientific disputes is within its discretion,” especially where “NMFS was aware of and explicitly acknowledged” the allegedly conflicting data. *Alaska et al. v. Lubchenco*, No. 3:10-cv-00271-TMB, ECF No. 130, at 33, 38 (D. Alaska Jan. 18, 2012); *see also Central Arizona Water Conservation Dist.* 990 F.2d at 1540 (noting that a reviewing court “must generally be at its most deferential” when the agency is “making predictions, within its area of special expertise, at the frontiers of science”). NMFS’s conclusions were reasonable and based on consideration of the relevant factors, and fully comported with the ESA. Plaintiffs fail to show otherwise, nor show any defect in the NEPA documentation of the decision.

I. Plaintiffs’ ESA Claims Should be Rejected.

NMFS reasonably concluded that the revised suite of measures continued to meet the ESA’s requirements and was not likely to jeopardize the WDPS or adversely modify critical habitat. Before describing in detail how Plaintiffs’ specific arguments fail, it is worthwhile to address more generally their lopsided view of how the ESA should be administered. Plaintiffs’ underlying objection is that NMFS “authorized new measures that roll back the recent protections” in the 2010 IFR previously found not to cause jeopardy. Pls.’ Br. on Summ. J., ECF No. 45 (“Pls.’ Br.”) at 1. Plaintiffs suggest it is illegitimate for the NPFMC to craft, or NMFS to authorize, new Steller sea lion protective measures that increase fishing opportunities while still sufficiently protecting Steller sea lions. *See* Pls.’ Br. at 16. But the entire structure of the Magnuson-Stevens Act promotes the role of the NPFMC in crafting fishery management measures, including measures to conserve marine mammals. Defs.’ Ex. 1, Groundfish FMP at 6015371. The Magnuson-Stevens Act requires NMFS to consider economic considerations in regulating fisheries to the extent practicable and lawful, *see* pages 6-7, *supra*, and the Magnuson-Stevens Act charges NMFS and the NPFMC with managing fisheries to “provide the greatest overall benefit to the Nation . . . taking into account the protection of marine ecosystems.” 16 U.S.C. § 1802(33)(A).

Nor is the ESA a one-way ratchet that only allows NMFS to *increase* Steller sea lion protections, particularly where, as here, the NPFMC and NMFS had more time, and more information, to refine the protective measures and analyze their effects. As this Court has noted, compliance with ESA section 7 does not require choosing only the alternative “that would most effectively protect the’ species from jeopardy or adverse modification.” *Alaska v. Lubchenco*,

No. 3:10-cv-00271-TMB, ECF No. 130, at 40 (quoting *Sw. Ctr. for Biological Diversity v. U.S. Bureau of Reclamation*, 143 F.3d 515, 523 (9th Cir. 1998)). For example, an RPA, when needed, must merely be an “alternative that complies with the § 7(a)(2) standards and can be implemented by the action agency.” *Id.* The Supreme Court has stated that the ESA’s “best scientific and commercial data” provision is intended in part to “avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives.” *Bennett v. Spear*, 520 U.S. 154, 176-177 (1997). There is no reason to surmise that an action modifying a prior RPA to reduce economic dislocation is contrary to ESA section 7. NMFS used methodologies in the 2014 BiOp that were very similar to previous BiOps, but refined them based on the best available information, including much information not available in 2010. *See Greenpeace IV*, 237 F. Supp. 2d 1181, 1195 (W.D. Wash. 2002) (“NMFS did not reverse or rescind earlier scientific conclusions, but merely concluded on the basis of additional knowledge—which did not contradict earlier considerations—that a more refined approach to reviewing impacts on critical habitat was possible.”). As shown below, none of Plaintiffs’ objections withstand scrutiny.

A. NMFS Did Not Impose Any Requirement That “Overlap” Be Found in All Four Dimensions as a Prerequisite to Finding Any Prey Competition.

The centerpiece of Plaintiffs’ case is a deeply flawed reading of the “overlap” analysis presented in Section 3.3 of the 2014 BiOp. Plaintiffs mistakenly assert that

The 2014 BiOp relies on novel analyses that allow it to conclude that there is no risk of competition between sea lions and fishing vessels unless there is certain proof that both are found in the identical place, at the same time, at the exact depth in the ocean, chasing fish of equivalent size. This extreme litmus test for gauging “overlap” of, and the potential for competition between, Steller sea lions and the commercial fisheries arbitrarily departs from 15 years of agency decision making and lacks any rational support in the record.

Pls.’ Br. at 2. In other words, according to Plaintiffs, the 2014 BiOp “require[d] overlap in all of the four dimensions of size of prey, place, time, and depth as a prerequisite to finding potential competition with the fisheries.” *Id.* at 33. This is simply untrue. Nor is NMFS’s overlap analysis a “new framework” that departed from past practice. *See id.* Nor is it true, as Plaintiffs repeatedly contend, that the 2014 BiOp concluded competition between fisheries and sea lions “would not occur” absent definitive proof in the overlap analysis. *See id.* at 45.

The “overlap” analysis was part of the “exposure analysis” described in Section 5.3 of the 2014 BiOp. As NMFS explained, an “exposure analysis” considers “the resources . . . that are

present in the action area that may be affected by the proposed action.” Pls.’ Ex. 28, 2014 BiOp at 1027694. The “overlap” analysis attempts to identify the resources that “co-occur with the stressors of a proposed action.” *Id.* The 2014 BiOp thus performs an “overlap analysis” to “assess the co-occurrence of the proposed removal of sea lion prey with Steller sea lions and designated critical habitat.” *Id.* Conceptually, consideration of such “co-occurrence” of the effects and the species must obviously be part of any ESA section 7 analysis, since a BiOp must “detail[] how the agency action affects the species or its critical habitat.” *See*, 16 U.S.C. § 1536(b)(3)(A). As in prior BiOps, NMFS considered four potential dimensions of overlap between fishing and sea lion foraging: spatial location, depth, prey size, and timing. Pls.’ Ex. 28, 2014 BiOp Fig. 5-42 at 1027763; *see also id.* at 1027694-1027740. Its analysis also considered “the frequency and intensity” of groundfish harvests. *Id.* at 1027741. Prior BiOps used the same framework. *See, e.g.*, Defs.’ Ex. 2, 2010 BiOp Fig. 4-24, at 1054852; *see also id.* at 1054399-403, 1054852) (overlap analysis based on size, depth, spatial, temporal overlap, and fishing intensity); Defs.’ Ex. 14, Analytical Approach at 1018021, 1019125 (errata) (describing overlap analysis in 2000 BiOp). A lack of overlap in any dimension is referred to as “partitioning.” NMFS acknowledged various limitations in the available data and concluded

[O]ur best understanding is that some amount of partitioning can be expected between the three fisheries and Steller sea lions, with the principal type of inferred partitioning being as follows for each fishery: Atka mackerel – place; Pacific cod – size; and pollock – depth. Some extent of direct overlap is also expected, with the principal type of inferred overlap being as follows for each fishery: Atka mackerel – size; Pacific cod – place; and pollock – size (and place in Area 541).

Pls.’ Ex. 28, 2014 BiOp at 1027761. NMFS appropriately considered these limited and qualified conclusions about overlap in its jeopardy analysis. And, as already described above, NMFS considered myriad other factors and data before reaching any conclusions about localized depletions or jeopardy, including area closures, fish distribution and movement, new data on sea lion movements, and management measures to limit harvests and disperse them temporally and spatially. Thus, it is simply false to claim that NMFS assumed “there is no risk of competition between sea lions and fishing vessels unless there is certain proof that both are found in the identical place, at the same time, at the exact depth in the ocean, chasing fish of equivalent size.” *See* Pls.’ Br. at 2.

Plaintiffs’ caricature of the role of the overlap analysis in the BiOp is at odds with reality. Section 5.3 of the BiOp carefully lays out the evidence on overlap, noting its limitations and

uncertainties. Then, in the risk assessment and jeopardy analyses, NMFS combines that information with many other sources and kinds of information and analysis. The BiOp never employs the simplistic decision rule imagined by Plaintiffs, in which any degree of partitioning eliminates the possibility of adverse effects. As the 2014 BiOp plainly states: “We demonstrate partial overlap combined with unknown initial biomass and replenishment rates for all four fisheries, **resulting in some potential for reduced prey resources.**” Pls.’ Ex. 28, 2014 BiOp at 1027762 (emphasis added). More specifically, the prey depletion that Plaintiffs say would be impossible under the alleged decision rule was actually found by the BiOp to be possible for pollock: “[t]he pollock fishery in Area 542 and 541 may create temporary localized depletion of pollock inside critical habitat in winter that may reduce the numbers and reproduction of sea lions in the immediate vicinity of the fishery.” *Id.* at 1027796; *id.* at 1027799 (“In the worst case scenario that the Area 542 pollock fishery results in adverse impacts to sea lion prey availability during February and March around one to two haulouts, then reproduction may be reduced at these haulouts.”). Moreover, NMFS reached this conclusion on pollock *despite* having found, in the overlap analysis, that pollock fisheries have “the least overlap in depth with Steller sea lions in the Aleutian Islands,” i.e., the greatest degree of depth partitioning. *Id.* at 1027737.

Plaintiffs confuse the issue by relying upon internal emails and memos in which some NMFS scientists critique a *draft* of Chapter 5 of the BiOp containing the overlap analysis. Pls.’ Br. at 23. But NMFS responded to these internal critiques, and made important modifications to clarify the BiOp in response to such comments, as described further in Section F, pages 38-41, *infra*.¹⁰ As shown above, NMFS considered many factors in its jeopardy analysis, and the overlap analysis simply did not provide an “extreme litmus test” as Plaintiffs portray. Nor was the overlap analysis a departure from past practice, but rather a continuation of the practices of prior BiOps.

B. The Overlap Analysis Did Not Assume That Prey Competition Can Only Occur Where Sea Lions Have Previously Been Observed.

¹⁰ Plaintiffs also rely on an inaccurate, simplistic interpretation of a flow chart, which depicts graphically how the “overlap” or “exposure” analysis is (conceptually speaking) prior to the risk assessment and jeopardy analysis that examine whether there are localized prey depletions, and whether any localized depletions could impact the survival and recovery of the species. *See* Pls.’ Br. at 21 (citing Pls.’ Ex. 28, 2014 BiOp Figure 5-42, at 1027763). Plaintiffs mistakenly imagine that this flow chart reveals a rigid decision rule governing the entire BiOp. But this flow chart is, as it is labeled, simply a “conceptual model” illustrating the logical progression of steps that occur in the BiOp. It does not create or describe any such “extreme litmus test.”

In addition to misrepresenting the overall role of the overlap analysis in the BiOp, Plaintiffs also misrepresent specifics of the overlap analysis. They argue, for example, that the spatial component of the overlap analysis (Section 5.3.4 of the BiOp) assumes that “Steller sea lions and the fisheries only compete in those specific spots where [telemetered and sighted sea lions] were observed in the same place as the fisheries.” Pls.’ Br. at 37. However, NMFS clearly stated the opposite: the spatial overlap presentation “is a presence-only look at where sea lions have been seen (Platform) or tracked (telemetry). **If an area has few or no sea lion locations or sightings, we cannot infer that the area is not used by sea lions.**” Pls.’ Ex. 28, 2014 BiOp at 1027707 (emphasis added). NMFS noted that this had not been as clearly stated in a draft of the BiOp, but in response to internal reviewer comments, NMFS clarified it in the BiOp and also in the record: “[A]ll conclusions about the extent of anticipated spatial overlap between Steller sea lions and the fisheries were based solely on areas proposed to be open to fishing rather than inferences from the telemetry information from a sample of the population.” Defs.’ Ex. 15 (Balsiger Memo 1044536-37).

Plaintiffs nonetheless insist, incorrectly, that NMFS “[n]arrowly focused on the specific locations visited by the 45 tagged sea lions,” and that it concluded “that Steller sea lions and the fisheries only compete in those specific spots where the 45 individuals (or limited opportunistic sightings) were observed in the same place as the fisheries.” Pls.’ Br. at 37 Plaintiffs offer no support for this statement. The pages of the BiOp they cite say nothing of the sort. In fact, on one cited page, NMFS plainly states the opposite: “[i]f an area has few or no sea lion locations or sightings, we cannot infer that the area is not used by sea lions.” Pls.’ Ex. 28, 2014 BiOp, at 1027707. Discussions of spatial overlap on other cited pages are plainly based not on extrapolations from sea lion telemetry locations, but rather on the simple fact that some areas will lack overlap between sea lions and fisheries because they will be areas *closed to fishing*. See Pls.’ Ex. 28, 2014 BiOp at 1027760-61 (finding a lack of “direct overlap between the fishery and sea lions” for Atka mackerel in certain areas because the areas are trawl exclusion zones, and finding low spatial overlap for pollock in Area 543 because “95% of critical habitat would be closed to the fishery”); 1027798 (cited by Pls.’ Br. at 38, and stating that low spatial overlap for Atka mackerel in Area 543 is based in part on closure of large areas to fishing, and partly based on NMFS’s “best understanding of habitat use” by adult females and juveniles). One of the pages

cited by Plaintiffs further notes that there is “some uncertainty about the potential for the fisheries to reduce prey resources in Area 543,” and that more complete telemetry data is needed to gain a “complete understanding of sea lion at-sea habitat use.” Pls.’ Ex. 28, 2014 BiOp at 1027798. This measured assessment is a far cry from Plaintiffs’ inaccurate caricature of how NMFS used spatial data on sea lion movements.

Plaintiffs also ignore that the BiOp’s discussions of how fisheries and sea lion foraging may intersect are often premised not just on sea lion location data and area closures, but also on improved data about where fishing is expected to occur in open areas. NMFS developed a database to analyze the spatial distribution of past groundfish harvests that improves upon similar information used in the 2010 BiOp. *Id.* at 1027741-1027759. Such data shows that even where critical habitat will be open to fishing, the actual areas and harvests expected are often quite limited. *See* page 24, *supra*. In addition, much of the Atka habitat in the Aleutian Islands is simply not amenable to bottom-trawl fishing at all. *Id.* at 1027779. Plaintiffs are silent on how such fishery information contributed to the spatial analysis.

C. Contrary to Plaintiffs’ Argument, NMFS Took Into Account That “Fish Move.”

Plaintiffs also assert that the overlap analysis is erroneous because NMFS failed to take into account that “fish move.” Pls.’ Br. at 35-36. According to Plaintiffs, NMFS failed entirely to consider that “fishing at some distance away from the sea lions may nonetheless “‘draw down’ the biomass of fish in the no-trawl area.” *Id.* (quoting Pls.’ Ex. 33, 2010 BiOp at 1054399-4). But to the contrary, the BiOp frequently discusses fish movement. For instance, NMFS considered how “Atka mackerel exhibit less horizontal movement in general compared to Pacific cod and pollock (Connors et al. 2013b), and may be more susceptible to localized depletion (Lowe et al. 2013).” Pls.’ Ex. 28, 2014 BiOp at 1027761. NMFS factored the greater movement rate of pollock into its consideration of the potential for localized depletions to be replenished. *Id.* at 1027761, 1027784. NMFS discussed at length the Fishery Interaction Team (“FIT”) studies and data of Atka mackerel movements, distribution, and abundance in exploring the impacts of the proposed rule. *Id.* at 1027771-74, 1027779.

Equally baseless is the accusation that NMFS failed to take into account that fish “move [vertically] in the water column during the day, so the same aggregation could be accessed as

different depth on the same day, feeding both [Steller sea lions] and the fishery.” Pls.’ Br. at 35-36 (quoting Pls.’ Ex. 3 at 3 (Brown Comment at 1043143)). In analyzing the potential for depth overlap between trawling and sea lion foraging, NMFS considered in detail the “diel vertical migration” (“DVM”) behavior of fish, and factored that information into its conclusions. See Pls.’ Ex. 28, 2014 BiOp, at 1027730 (DVM of Atka mackerel); 1027732 (DVM of Pacific cod); 1027734-35 (DVM of pollock); 1027737 (discussing DVM of all three species).

D. Plaintiffs’ Other Criticisms of the Overlap Analysis and Data are Unfounded.

Plaintiffs argue that NMFS, in using the depth overlap data, did not consider the criticism “that it is unknown which depths are successful foraging depths” for Steller sea lions. Pls.’ Br. at 39 (citing Pls.’ Ex. 38 at 7 (NMML Memo at 1030868)). They further allege that “the 2014 BiOp does not cite or discuss the relevant Russian study identified by the National Marine Mammal Laboratory scientists,” allegedly showing that “the most successful dives for prey accounted for a relatively small percentage of dives.” Pls.’ Br. at 25-26 (citing Pls.’ Ex. 4 at 4 (Burkanov et al. 2010 at 6024671)). The 2014 BiOp explicitly discussed this study, citing an even more extensive discussion in the FEIS, and acknowledged its findings that Plaintiffs say were ignored. Pls.’ Ex. 28 at 1027725; *see also* Defs.’ Ex. 13, FEIS at 3160750. At the same time, NMFS found that overall, the Russian data showed sea lion dive profiles similar to NMFS’s other data. *Id.* And the conclusions drawn by NMFS from the dive depth data and fishing depth data remained reasonable in spite of such acknowledged uncertainties about which particular dives yield the most food for sea lions. For example, all pollock trawls in Area 543 from 1998 to the present were at depths below 260 meters. Pls.’ Ex. 28, 2014 BiOp Fig. 5-27, at 1037736. But the data showed dives to such depths by Steller sea lions in Area 543 to be exceedingly rare. *Id.*, Fig. 5-22, at 1027726. It was thus reasonable to draw the modest and qualified conclusion that “[b]ased solely on the depths that have been observed for the pollock fishery and sea lions, there appears to be partitioning between the depth of the pollock fishery and sea lions, with the greatest apparent partitioning occurring in Area 543.” *Id.* at 1027735. That the data on depth overlap is complex and subject to differing interpretations does not render NMFS’s cautious use of it arbitrary and capricious.

Plaintiffs also quote the 2000 BiOp to point out that “scientists . . . can measure only

what [fish size] was consumed, not necessarily what was preferred by a sea lion,” so that “diet information may reflect the fisheries’ removal of the largest fish” Pls.’ Br. at 36 (citing Pls.’ Ex. 37 at 15-16 (2000 BiOp at 6013717-18)). Plaintiffs offer no reason to doubt that NMFS’s analysis of prey size was a presentation of the “best available” data, *see* Pls.’ Ex. 28, 2014 BiOp, at 1027737. Nor did NMFS draw any unreasonable or incautious conclusions from the size overlap data. Far from assuming away size overlap, NMFS concluded that there was “considerable overlap in the sizes of pollock [] and Atka mackerel [] taken by Steller sea lions and the commercial trawl fisheries,” with the least amount of overlap with respect to prey size for Pacific cod. *Id.* at 1027739-40. Plaintiffs assert that NMFS’s data may under-represent sea lions’ preference for larger cod, but NMFS did not conclude sea lions would not eat larger cod. Rather, it found that there was “some overlap in the mid-sizes and **an unknown extent of overlap for larger cod.**” *Id.* at 1027780 (emphasis added). Plaintiffs assert that “a lack of demonstrated spatial overlap actually could be a symptom of competition—not a reason to conclude that no competition exists.” Pls.’ Br. at 35 (citing Pls.’ Ex. 11 at 6 (Fritz Comments at 1002169)). But Plaintiffs cite no scientific evidence to support this assertion, nor show that NMFS drew any unreasonable conclusions from the best available information on spatial overlap.

E. NMFS Did Not Fail to Consider Pollock Biomass Abundance Levels.

Plaintiffs allege that “[t]he final 2014 BiOp does not address the potential impact of low overall biomass in the Aleutian Islands on competitive interactions between Steller sea lions and the fisheries,” basing this assertion on a question raised about pollock abundance by a NMFS official in an email. Pls.’ Br. at 26 (citing Pls.’ Ex. 43 at 3 (Rauch Email Thread at 1026627)).

The fact that one official raised a question about overall pollock biomass does not show that NMFS failed to properly consider the issue in the BiOp. In fact, the BiOp has an entire section entitled “Status of Pollock in the Action Area,” which discusses how “[t]he general trend for recent years (2002–current) is low pollock abundance in Areas 542 and 543 with a more abundant, but patchy distribution in Area 541.” Pls.’ Ex. 28, 2014 BiOp at 1027671. The BiOp also provides data on pollock abundance and catch going back to 1992. *Id.*, Table 4-12, at 1027671. NMFS factored the relatively low local abundance levels into its analysis that the proposed fishing levels could, in a worst-case scenario, cause some localized depletions of pollock. *Id.* at 1027784. It should also be kept in mind that fishery stocks all fluctuate over time due to a variety of environmental and other factors. The abundance of pollock at the time of the

BiOp, while low compared to 1992, was higher than levels seen in 1996-2012. *Id.*, Table 4-12, at 1027671. In any event, the levels were not low enough at the time of the BiOp to either designate the stock “overfished,” or to trigger the harvest control rule. NMFS also noted that pollock’s high movement rates would allow it to quickly replenish local depletions. *Id.* at 1027794.

F. NMFS Did Not Ignore Internal Scientific Critiques, and the Existence of Debate Does Not Show the 2014 BiOp Was Arbitrary and Capricious.

Plaintiffs note that several scientists criticized aspects of the draft BiOp, including a scientist from NMFS’s Alaska Fisheries Science Center (“AFSC”), and another at the National Marine Mammal Laboratory within the AFSC. Pls.’ Br. at 23. Plaintiffs thus argue that the 2014 BiOp was arbitrary and capricious in “[i]n ignoring its own experts’ scientific advice.” Pls.’ Br. at 38. It is not arbitrary and capricious for an agency to make a decision merely because some scientists voice disagreement. *Trout Unlimited v. Lohn*, 559 F.3d 946, 959 (9th Cir. 2009) (“NMFS is entitled to decide between conflicting scientific evidence.”). Moreover, perceived flaws of a draft BiOp have no bearing on the adequacy of the final product. *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007) (noting that under the APA courts “review only an agency’s final action”).

Nor did NMFS “ignore” these scientists’ views. Although the AFSC has no role in enforcing the ESA or crafting biological opinions, all these views were considered, as were those of a NMFS Alaska Region reviewer who took issue with a draft of the BiOp. These critical reviews reflect that NMFS engaged in a robust scientific debate on scientific questions widely agreed to be highly complex and controversial. Based on these reviews of the draft BiOp, NMFS revised some aspects, clarified others, and in some instances, considered the input and rationally adopted a contrary viewpoint in the final BiOp. Such decisions are well within the agency’s discretion and entitled to a high level of judicial deference. *See Ctr. for Biological Diversity v. Federal Highway Admin.*, 290 F. Supp. 2d 1175, 1194 (S.D. Cal. 2003) (“[A]n effective deliberative process, by its very nature, requires the expression of open, frank and often contradictory opinions.”); *see also Nat’l Wildlife Fed’n v. U.S. Army Corps of Eng’rs*, 384 F.3d 1163, 1174 (9th Cir. 2004) (holding that a dissenting email did not indicate that final agency action was arbitrary, because it was “preliminary, and not the official view of the agency”).

Plaintiffs’ examples also show no defect in the final BiOp. They highlight a NMFS scientist’s critique that NMFS’s exposure analysis in Chapter 5.3 assumed that “one dimension of partitioning (‘some’) is all that’s necessary to conclude that there is no resource competition

and that the likelihood of reduced prey resources is small.” Pls.’ Br. at 24 (quoting Pls.’ Ex. 38 at 8 (NMML Memo at 1030869)). This critique was made regarding the draft BiOp, not the final, and without the reviewer in question having reviewed the jeopardy chapter. Moreover, this particular criticism is simply not an accurate characterization of the final 2014 BiOp: NMFS never assumed, in its risk assessment or jeopardy analysis, that a finding of resource partitioning in any one of four dimensions in the Section 5.3 overlap analysis ruled out all possibility of finding prey competition in the jeopardy analysis. *See* Part A, pages 31-33, *supra*.

Similarly, Plaintiffs highlight a criticism made by internal reviewers that the sample size of the available sea lion telemetry data was too limited to draw inferences about where sea lions would not be found, and should only be used to show where sea lions actually had been tracked. Pls.’ Br. at 37. NMFS acknowledged that this was a valid point regarding language used in the draft BiOp, and agreed that the spatial overlap analysis in Section 5.3.4 should better “explain the limitations of the available data and the limitations of the conclusions that could be drawn with those data.” Defs.’ Ex. 15, Balsiger Memo at 1044536; *see also, e.g.*, Pls.’ Ex. 7 at 1025808-810 (email exchange between BiOp lead author and reviewer on the spatial overlap analysis). Thus, “[i]n response to concerns raised by reviewers about the inadequate sample size of telemetered sea lions, NMFS revised the [Section 5.3.4 spatial overlap] analysis to consist of a ‘presence only’ analysis and removed any inferences about the absence of observed sea lion locations.” Defs.’ Ex. 15, Balsiger Memo at 1044536. The final BiOp also discusses the limitations of the Platform data, noting for example that “[w]here Platform data were sparse, [they] provide no information about the use or lack of use by Steller sea lions.” Pls.’ Ex. 28, 2014 BiOp, at 1027724. However, as in 2010, NMFS reasonably noted that Platform data, when combined with telemetry, provides “more comprehensive temporal and spatial representation” of Steller sea lion distribution than provided by telemetry data alone. *Id.*

Plaintiffs also highlight an email exchange in which a reviewer suggested performing a new “simulation analysis . . . to look at how robust the conclusions [from telemetry data] are with the available number of tagged animals prior to finalizing the BiOp.” *See* Pls.’ Br. at 24-25 (quoting Pls.’ Ex. 7 at 1 (DeMaster Email at 1025808)). The lead author of the BiOp replied that this new study was not necessary because the overlap analysis was not actually going to extrapolate or infer non-occurrence of sea lions beyond the areas where they were observed: “[we] did not use the telemetry data in a model—we simply plotted it.” Pls.’ Ex. 7 at 1025808. She agreed, however, that the presentation of the telemetry data should be accompanied by a

“caveat that the sample size is too small to make inferences for the population.” *Id.*; *see also* Pls.’ Ex. 28, 2014 BiOp at 1027707 (noting that “the sample size of telemetered animals is small and may not be representative of the whole population”). The conclusion that the suggested study was not necessary was reasonable—and there is no requirement in the ESA or the APA that the ESA consulting agency improve upon the best available data by performing additional studies. The ESA “best available data” requirement “merely prohibits [an agency] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on.” *Kern County Farm Bureau v. Allen*, 450 F.3d 1072, 1080 (9th Cir. 2006).

As shown above, NMFS rationally considered these internal critiques. *See supra* at 38-40; *see also* Defs.’ Ex 29, at 1041985 (email exchange between a NMFS supervisor and the lead author of the BiOp, discussing how the final BiOp will address comments from a biologist that he supervises (Pls.’ Ex. 45), and how the final BiOp will also address similar comments from the National Marine Mammal Laboratory (Pls.’ Ex. 38)). It should also be noted that although many of these internal comments focused on the spatial overlap analysis in Section 5.3.4 of the draft BiOp, none of these internal reviewers rejected the use of telemetry data and Platform data in the BiOp as constituting the best available data on Steller sea lion movements and locations. Moreover, none objected to the distinct use of telemetry data in Section 5.2 of the BiOp, where such data was used to make inferences about general patterns of Steller sea lion foraging behavior, and in particular was used to analyze the degree to which Steller sea lions forage within nearshore areas inside critical habitat, compared to areas further out to sea. A similar telemetry analysis was used in the 2010 BiOp as the basis for the RPA closing areas outside of critical habitat in Area 543 to directed catch of Pacific cod and Atka mackerel. In 2014, NMFS properly re-assessed this conclusion in light of better information, and found that the 2010 closures were not presently supported by the best available evidence. *See* pages 24-25, *supra*. Neither Plaintiffs, nor the internal reviewers they cite, challenged how the telemetry data was used in Section 5.2 of the BiOp to evaluate the relative importance of different areas for sea lion foraging or to remove the closures of areas outside critical habitat in Area 543. It would be surprising if Plaintiffs *had* challenged such an analysis, since they defended the same use of telemetry data in the 2010 BiOp. *See* Intervenor-Defs.’ Opp. to Summ. J., *Alaska v. Lubchenco*, No. 10-cv-00271-TMB, ECF No. 99, at 27 (D. Alaska Aug. 15, 2011) (noting that “[t]he fact that the [telemetry] data may be limited does not mean that it is not valid”). Similarly, a court reviewing the 2001 BiOp affirmed that “telemetry data is the ‘best available science’ for tracking

where Steller sea lions are located,” and for evaluating “the varying importance of different areas of critical habitat.” *Greenpeace IV*, 237 F. Supp. 2d 1181, 1196 (W.D. Wash. 2002).

The fact that internal reviewers discussed potential data gaps and uncertainties highlights the comprehensiveness of the agency’s effort, and underscores that the agency’s decision was not arbitrary and capricious, but rather an exercise in reasoned, expert decision-making. Plaintiffs cherry-pick dissenting views on a draft, views that NMFS acknowledged and considered, and misguidedly suggest that the agency has acted arbitrarily. They are mistaken.

G. The BiOp Did Not Unlawfully Fail to “Identify[] the Critical Tipping Point.”

Plaintiffs argue that the 2014 BiOp is invalid because the ESA allegedly “requires that a no jeopardy finding be substantiated by identification of a ‘tipping point’ against which to measure the action” Pls.’ Br. at 40; *see also id.* at 2 (alleging that NMFS unlawfully failed to identify “the critical tipping point at which the admitted potential for competition turns into a risk of jeopardy”). Plaintiffs misstate the law. There is no requirement that every ESA section 7 no-jeopardy determination specify a “tipping point,”¹¹ nor was there any requirement or need to do so in this case.

As noted above, the interaction between Steller sea lions and their environment is extremely complex, and there are many gaps in the available data on sea lion foraging, population dynamics, and the effects of fisheries, if any, on their reproduction, growth and survival. NMFS therefore appropriately determined that a qualitative approach to the analysis was required. *See* pages 22-23, *supra*. Plaintiffs are thus misguided in their insistence that NMFS must quantify the level of effects that would cause jeopardy, or must avoid qualitative assessments. *See, e.g.,* Pls.’ Br. at 22 (arguing that NMFS must explain “the degree of overlap that corresponds to designations such as ‘high’ or ‘low’”). NMFS must use the best available science, and the best available science on the dynamics of a vast, complex ecosystem is not always amenable to precisely quantifying causal relationships or predictions. *See Ranchers Cattlemen Action Legal Fund United Stockgrowers of America v. U.S. Dept. of Agric.*, 415 F.3d 1078, 1096-97 (9th Cir. 2005) (rejecting argument that the use of qualitative terms such as “low”

¹¹ Moreover, it is not even clear what sort of “tipping point” Plaintiffs imagine NMFS might identify. Plaintiffs state that NMFS failed to “quantify[] or otherwise explain[] how much partitioning is adequate to insure against the likelihood of jeopardy or adverse modification.” Pls.’ Br. at 40. Neither overlap nor partitioning constitutes an adverse effect on Steller sea lions or their habitat, so this criticism makes no sense.

in a scientific analysis rendered it arbitrary and capricious, and rejecting “[t]he district court’s imposition of such a bright line prohibition on qualitative standards”).

Neither ESA section 7 nor its regulations require that biological opinions include discussion of a specific jeopardy “tipping point.” See *Greenpeace IV*, 237 F. Supp. 2d 1181, 1193 (W.D. Wash. 2002) (“Although the administrative record does not clearly state when jeopardy or adverse modification would occur, . . . the ESA does not require NMFS to actually declare such a line.”) The duty of the action agency is to “insure,” in consultation with the consulting agency, that the action “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of” its designated critical habitat. 16 U.S.C. § 1536(a)(2); see also 50 C.F.R. § 402.02. NMFS carried out such an analysis, as described above. See pages 18-28, *supra*.

Plaintiffs’ assertion that NMFS must identify a jeopardy “tipping point” is based on misreading two cases: *National Wildlife Federation v. National Marine Fisheries Service*, 524 F.3d 917 (“*NWF v. NMFS*”), and *Wild Fish Conservancy v. Salazar*, 628 F.3d 513 (9th Cir. 2010) (“*Wild Fish Conservancy*”). *NWF v. NMFS* never uses the phrase “tipping point.” Rather, *NWF v. NMFS* says that an agency must “not take action that will tip a species from a state of precarious survival into a state of likely extinction.” *NWF v. NMFS*, 628 F.3d at 930. This gloss on the ESA jeopardy standard does not create a requirement for every no-jeopardy BiOp to quantify or identify a specific “tipping point.” NMFS insured that it will not “tip” the Steller sea lions into jeopardy, because the 2014 BiOp conservatively assumes nutritional stress to be a possible threat, carefully analyzes the possibility of localized prey depletions, and finds that significant prey depletions are unlikely. And the 2014 BiOp further insures the action will not “tip” the species into jeopardy, because it conservatively focuses on avoiding population-level effects both at the level of the WDPS and at the level of any sub-regional population. These Recovery Plan criteria provide “the basis from which to gauge the risk of extinction for the WDPS and compose the core standards upon which a decision to remove the WDPS for the Endangered Species List will be based.” Pls.’ Ex. 28, 2014 BiOp at 1027597.

Plaintiffs also misapply the Ninth Circuit’s statement in *NWF v. NMFS* that “[i]t is only logical to require that the agency know roughly **at what point** survival and recovery will be placed at risk before it may conclude that no harm will result from ‘significant’ impairments to habitat that is already severely degraded.” Pls.’ Br. at 40-41 (quoting *NWF v. NMFS*, 628 F.3d at 936) (emphasis added). As the 2014 BiOp found, the proposed action is not likely to have *any*

deleterious population-level effects, even at the sub-population level. Pls.’ Ex. 28, 2014 BiOp at 1027798. In contrast, in *NWF v. NMFS*, the Ninth Circuit was addressing a case where the agency made explicit findings that “the proposed [action] would have significant negative impacts on each affected species’ critical habitat.” *NWF v. NMFS*, 628 F.3d at 934-35. The action in *NWF v. NMFS* would “lower survival for the entire duration of the proposed action” for Snake River Spring/Fall Chinook salmon, and “reliance on the hatchery operation itself threatens the sockeye [salmon’s] chances of recovery.” *Id.* at 935. In contrast, in this case, there was no finding of any significant impairments to survival or recovery from the action. Moreover, in *NWF v. NMFS*, these significant species-level harms were added to a “severely degraded” baseline, *see id.* at 936, whereas there is no indication of a severely degraded baseline here.

Accordingly, a court in this district rejected the similar argument that NMFS had violated the ESA in a biological opinion concerning adverse effects of seismic surveying on beluga whales. Those plaintiffs, like the present Plaintiffs, quoted *NWF v. NMFS* to argue that NMFS did not provide any “analysis of ‘roughly at what point’ recovery will be at risk.” *Native Village of Chickaloon v. NMFS*, 947 F. Supp. 2d 1031, 1063 (D. Alaska 2013). As the court noted, however, there was no need for NMFS to specify “roughly at what point survival and recovery will be placed at risk” for beluga whales, because the *NWF v. NMFS* language only applied where an action “would have significant negative impacts on the species’ critical habitat.” *Id.* at 1063 n. 244 (quoting *NWF v. NMFS*, 524 F.3d at 934-95). The same holds true in the present case—the quoted language from *NWF v. NMFS* is simply not applicable here.

Plaintiffs also quote *Wild Fish Conservancy*’s statement that a biological opinion was invalid because “[t]he Service has not determined when the tipping point precluding recovery of the Icicle Creek bull trout population is likely to be reached, nor, necessarily, whether it will be reached.” Pls.’ Br. at 40-41, quoting 628 F.3d at 527. In that case, the Ninth Circuit did not hold that every no-jeopardy analysis must identify a specific “tipping point,” and the quoted language addresses a much narrower, fact-bound issue. In *Wild Fish Conservancy*, the consulting agency concluded that proposed fish hatchery operations would not affect the “current distribution and abundance of bull trout in the action area,” and yet simultaneously found that the action would “reduce, and in some years preclude,” upstream migration necessary to sustain the important but declining Icicle Creek sub-population. 628 F.3d at 526-527. The Ninth Circuit found these two conclusions to be in “contradiction,” rendering the jeopardy conclusion “inexplicabl[e].” *Id.* The present case, in contrast, is not one in which the BiOp contains contradictory conclusions, nor

does it contain any finding that the action will impair the survival and recovery of an important sub-population. It is true that in this case, the Western Aleutians sub-regional population is declining, but NMFS concluded that the proposed action is not likely to contribute to that decline. And the *Wild Fish Conservancy* decision made “no determination regarding whether the Service could have issued a rational no jeopardy conclusion in light of continuing negative population trends.” *Id.* As for the “tipping point” language, the Ninth Circuit was responding to a specific argument that the Icicle Creek population was likely to persist well into the future because it had been in decline since 1940. *Id.* at 527. The Ninth Circuit disagreed, stating that the agency had not identified “when the tipping point precluding recovery of the Icicle Creek bull trout population is likely to be reached, nor, necessarily, whether it will be reached” as a result of the proposed action. *Id.* The 2014 BiOp, in contrast, does not in any fashion premise its conclusions on an assumption or assertion that the Western Aleutians sub-population will persist. In sum, the *Wild Fish Conservancy* “tipping point” language is irrelevant here.

H. NMFS Did Not Find “Negative ‘Population-Level Effects.’”

Plaintiffs assert that the BiOp contains “findings” that “the fisheries’ expansion into Steller sea lion critical habitat poses a risk of localized depletion and negative ‘population-level consequences.’” Pls.’ Br. at 21 (citing Pls.’ Ex. 28, 2014 BiOp at 1027777). In reality, the BiOp makes no such “findings.” Plaintiffs here simply misrepresent the *question posed* by the BiOp as being the conclusion the BiOp reached. The full passage quoted by Plaintiffs actually reads:

In this risk assessment we aim to understand whether the groundfish fisheries compete with sea lions by creating localized depletions of fish stocks. Steller sea lions depend on temporally and spatially reliable concentrations of prey near rookeries and haulouts, thus localized depletion of prey in important sea lion foraging areas could result in deleterious population-level consequences.

Pls.’ Ex. 28, 2014 BiOp, at 1027777 (emphases added). After performing the analysis, NMFS answered the question: “NMFS concludes . . . that the proposed measures are unlikely to yield population-level effects.” *Id.* at 1027797. Plaintiffs’ assertion is a striking example of taking words out of context in order to invert their meaning.

II. **Plaintiffs’ NEPA Challenges Are Without Merit.**

NMFS prepared an exhaustive EIS that fully addressed the potential environmental impacts of the preferred alternative and five other alternatives. Plaintiffs are unable to raise a direct challenge to the EIS’s adequacy, and so mount a convoluted challenge asserting that the FEIS fails to disclose and respond to internal reviews that exposed alleged scientific flaws in the

draft 2014 BiOp analysis. This argument fails. NMFS's EIS took the requisite hard look and adequately informed the public of the potential environmental impacts of the alternatives. It did not need to address comments to the draft BiOp in its EIS—and as discussed above, NMFS addressed the concerns raised by internal comments (and indeed, made substantive modifications as a result of those comments) before issuing the 2014 BiOp. Accordingly, Plaintiffs' NEPA challenges must fail.

A. NEPA's "Hard Look" Requirement

NEPA does not impose any substantive obligations upon an agency, however it does require that an agency take a "hard look" at the environmental consequences of its decision-making. *Neighbors of Cuddy Mt. v. Alexander*, 303 F.3d 1059, 1071 (9th Cir. 2002) (quoting *Robertson*, 490 U.S. 332, 350 (1989)). Whether an agency has taken a "hard look" at the consequences of its decision-making is governed by the APA "arbitrary and capricious" standard. *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998), *overruled in part on other grounds by Lands Council v. McNair*, 537 F.3d 981, 997 (9th Cir. 2008). In taking a "hard look," an agency must include a discussion of adverse impacts. *Native Ecosystems Council v. United States Forest Service*, 428 F.3d 1233, 1241 (9th Cir. 2005). Specifically, the document must contain "a reasonably thorough discussion of the significant aspects of the probable environmental consequences." *Oregon Env'tl. Council v. Kunzman*, 817 F.2d 484, 492 (9th Cir. 1987) (quoting *Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974)).

Consistent with the "hard look" requirement, an agency must ensure the professional and scientific integrity of the discussion of environmental impacts in the EIS. 40 C.F.R. § 1502.24. However, while an agency must provide "a full and fair discussion" of environmental impacts that does not mean that the agency must resolve, or even expressly address, all scientific uncertainty. *Lands Council*, 537 F.3d at 1002. In fact, the Ninth Circuit has made clear that an agency also need not respond to every single adverse comment or study. *Ecology Ctr. v. Castaneda*, 574 F.3d 652, 668 (9th Cir. 2009) (refusing to invalidate an EIS because the agency failed to respond to a study, even though the study challenged the scientific basis upon which the FEIS was based). This is because NEPA does not require that the agency "present every uncertainty in its EIS." *Lands Council*, 537 F.3d at 1001. Experts in the scientific field routinely disagree and imposing such a burden upon an agency may paralyze its decision-making ability. *Id.* Further, NEPA does not prescribe a manner in which scientific uncertainty must be dealt. *Roberston*, 490 U.S. at 334. Internal disagreement within agencies can demonstrate that the

agency has come to a reasoned decision due to the abundance of information available during its decision-making. *Greater Yellowstone Coal. v. Larson*, 641 F. Supp. 2d 1120, 1135 (D. Idaho 2009) (court found internal agency disagreement illustrated that there was “abundant information” upon which the agency could make a “reasoned scientific decision”). Courts generally refuse to fly speck an EIS and substitute its judgment for that of the agency. *Lathan v. Brinegar*, 506 F.2d 677,693 (9th Cir. 1974).

B. NMFS did not need to Address and Resolve Internal Comments on the draft BiOp in its EIS.

Plaintiffs complain that internal agency scientists’ critique to the draft 2014 BiOp were not disclosed in NMFS’s NEPA documents. Pls’ Br. at 46. Plaintiffs’ contentions fail. NMFS appropriately disclosed the analyses on which it relied (including their limitations). NMFS was not required to list every adverse comment made to the 2014 draft BiOp in the FEIS nor refute at length each and every such comment. *Ecology Ctr.*, 574 F.3d at 668.

As discussed above, NMFS was required to provide a full and fair discussion of the potential impacts of its proposed action. NMFS’s EIS did so. The FEIS fully provides the decision makers with the ability to compare and contrast the effects of the alternatives on Steller sea lions by disclosing information on fishery removals of prey and critical habitat closures under the alternatives within the action area. Defs’ Ex. 13, at 3154158-3154251. FEIS Chapter 5 includes the evaluation of the effects of the alternatives on Steller sea lion incidental takes, disturbance, and potential effects on prey using the best available information. *Id.* at 3154047-3154322. EIS Section 5.2.2 describes the method used to analyze the effects of the alternatives with the best available scientific information and the assumption applied to the analysis. *Id.* at 3154142-3154235. The best scientific information available includes quantitative fisheries catch information in time and space and critical habitat locations in relation to fishing activity. This information is used to compare and contrast the effects of the alternatives. (79 FR 70300).

Further the EIS disclosed areas of controversy and uncertainty surrounding Steller sea lion protection measures—including issues related to the effects of fisheries on Steller sea lion prey availability when and where sea lions forage. Indeed, in the FEIS’ Executive Summary entitled “Areas of Controversy” and “Issues to be Resolved,” it expressly described points of uncertainty with which scientists grappled. Defs’ Ex.13, at 3153769-3153771. For example, these sections note that there is persistent disagreement among the scientific community about

the interpretation of scientific data as it relates to Steller sea lion foraging patterns and potential fisheries interaction. *Id.* at 3153769, 3154117-3154118, and 3154153-3154158.

Plaintiffs, however, apparently argue that the EIS is defective because it failed to list and include in this discussion a specific response to specific internal comments to the draft BiOp addressing the specific “overlap analysis” used only in the draft BiOp. This contention fails because no case law supports Plaintiffs’ contention that NMFS failed to adequately describe its analysis, including its limitations. In fact, as the Ninth Circuit has made clear, an agency need not respond to every single adverse comment or study. *Ecology Ctr.*, 574 F.3d at 668 (refusing to invalidate an EIS because the agency failed to respond to a study, even though the study challenged the scientific basis upon which the FEIS was based). And it is certainly the case that an EIS need not disclose and discuss every internal agency comment providing some criticism to an agency’s analysis—particularly those addressing any separate document referred to in the

EIS. Indeed, as the Ninth Circuit discussed in *Lands Council*, “experts in every scientific field routinely disagree.” 537 F.3d at 1001. Requiring an FEIS to list and address every such instance would “prevent the [agency] from acting due to the burden it would impose.” *Id.*

Plaintiffs rely on *Western Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 493 (9th Cir. 2011), where an agency ignored concerns from a variety of experts, including internal experts. *Western Watersheds* is distinguishable: in that case, the court held that the agency “neither responded to [the experts’] considered comments “objectively and in good faith” nor made responsive changes to the proposed regulations.” In contrast, NMFS did not simply ignore the issues underlying the comments on the draft BiOp. To the contrary, the EIS expressly discusses the scientific uncertainty and disputes relating to the effects of fisheries on Steller sea lion prey availability. Defs’ Ex.13, at 3154142-3154157. What’s more, NMFS also addressed them directly in the BiOp, and made some modifications as a result. *See* Sections I.A-F, *infra*. The 2014 BiOp explained NMFS’s use of the overlap analysis: Section 5.3 of the BiOp carefully lays out the evidence on overlap, noting its limitations and uncertainties. NMFS’s EIS properly adopts, and incorporates by reference, the 2014 BiOp and all of its analysis, regarding the effects of the proposed action on the WDPS Steller sea lion population, per the requirements of the ESA. *Id.* at 3160455.

The EIS's reference to the BiOp was proper. 40 C.F.R. § 1502.21 contemplates the need for agencies to incorporate by reference and encourages them to do so. That data supporting NMFS' determination that the proposed action complies with the ESA appears in the 2014 BiOp rather than the FEIS itself is immaterial. The relevant consideration is whether the information was before the agency at the time of its preparation. Moreover, because judicial review under the APA is based on the "whole record," 5 U.S.C. § 706, "there is no requirement that every detail of the agency's decision be stated expressly. . . The rationale is present in the administrative record underlying the document, and this is all that is required." *In re Operation of Mo. River Sys. Litig.* 421 F.3d 618, 634 (8th Cir. 2005); *San Luis & Delta-Mendota Water Auth. v. Salazar*, 666 F. Supp. 2d 1137, 1156 (E.D. Cal. 2009). Plaintiffs' reliance on *Center for Biological Diversity v. United States Forest Serv.*, where any agency failed to identify and address the concern raised by opposing viewpoints, is misguided. 349 F.3d 1157, 1157 (9th Cir. 2003). *Center for Biological Diversity* is distinguishable: there the Plaintiffs challenged the agency's disclosure of external scientific criticisms in the EIS. 349 at 1161-64. There the agency redacted the entirety of one particular statement that refuted the agency's basis for its conclusion. *Id.* at 1168. In contrast here, the agency does address, respond and raise the very opposition and uncertainties underlying the analysis of fishery effects on Steller sea lion prey availability and it incorporates by reference the 2014 BiOp's discussion of fishery effects on the WDPS of Steller sea lion population necessary to insure that the proposed action is not likely to jeopardize the continued existence or adversely modify or destroy designated critical habitat.

Plaintiffs also rely on *Lands Council*, 537 F.3d at 1001. Yet in that case, the court held that an agency "must acknowledge and respond to comments by *outside parties* that raise significant scientific uncertainties and reasonably support that such uncertainties exist. . . ." *Id.* (emphasis added). Similarly, Section 1509.2(b) addresses an agencies' obligation to respond to comments received on the draft EIS in the public comment period. Neither of these authorities are applicable to Plaintiffs' claim: they are not alleging that NMFS failed to adequately respond to comments it received on the draft EIS. And in fact, NMFS did respond to the comments it received (including those raising challenges to the underlying science on the effects of fisheries

on the availability of prey for Steller sea lions). Defs' Ex. 13 at 3078662-3078763.¹² Plaintiffs' NEPA claim fails.¹³

III. Two Claims in Plaintiffs Complaint Have Been Waived.

Plaintiffs abandon and waive at least two of the claims identified in the Complaint by not arguing for them in their summary judgment brief. *See Mountain States Legal Found. v. Espy*, 833 F. Supp. 808, 813 n.5 (D. Idaho 1993) (entering summary judgment in favor of defendants on claim not raised by plaintiffs in cross-motion for summary judgment); *see also Eberle v. City of Anaheim*, 901 F.2d 814, 818 (9th Cir. 1990) (holding that issue raised for the first time in reply brief is waived). The Court accordingly should enter summary judgment in favor of Federal Defendants on the following two claims: (1) First claim for relief, Part D, alleging NMFS failed to acknowledge or discuss the correlation identified in the 2010 BiOp between fishing restrictions adopted in the 2000s and demographic trends in WDPS sub-populations. Complaint ¶ 102.D; *see also id.* ¶ 91; (2) First claim for relief Part E, alleging that NMFS was arbitrary and capricious in electing not to use pup/non-pup ratios used in the 2010 BiOp as a natality indicator. Complaint ¶ 102.E; *see also id.* ¶ 92.

¹² It is important to note that ultimately, even if individuals within NMFS held contrary views, NMFS was not required to defer to those views in place of its own final determinations. *See Nat'l Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644, 658–59 (2007) (under the APA, the court reviews the agency's final action, not views of subordinate representatives). *See also Forest Guardians v. U.S. Fish & Wildlife Serv.* 611 F.3d 692, 718 (10th Cir. 2010). The internal reviews on the draft 2014 BiOp were part of the agency's process of reaching a final decision. For these reasons, many of the initial comments on the 2014 draft BiOp were subject to change as more information was gathered on the agency's preferred alternative. *See also Friends of the Earth v. Hintz*, 800 F.2d 822, 834 (9th Cir. 1986) (“The Corps’ ultimate decision was not a reversal but simply the culmination of over a year and a half of investigations, meetings, and reports. . . . Certainly, the Corps’ initial comments were preliminary and subject to change as understanding of permit issues expanded . . .”).

¹³ To the extent Plaintiffs are claiming that the EIS needed to itself include an evaluation of effects on WDPS of Steller sea lion population as a whole, this claim fails. In Chapter 5.2.2.2 of the FEIS, NMFS explained that the information used for the prey availability analysis in this FEIS does not provide a population level analysis for the WDPS of Steller sea lions, but focused on prey availability for Steller sea lions under the alternatives in the action area, which is the Aleutian Islands. Defs' Ex. 13, at 3154158 and 3153780. NMFS determined under its expertise that an analysis of WDPS population level effects in the FEIS would not have informed decision-makers on which specific areas to open or close or which harvest limits are necessary at the local, fine-scale level to avoid localized depletion in the Aleutian Islands. *Id.* Further, an extensive analysis of the effects of the proposed action on the WDPS of Steller sea lions population was conducted by NMFS in the 2014 BiOP and was discussed previously at pages 18-28, 31-41, *infra*.

IV. If the Court Were to Find a Violation, it Should Request Further Remedy Briefing.

Plaintiffs ask the Court to vacate the 2014 Final Rule. Pls.' Br. at 46-48. However, any remedy imposed by the Court should not be "more burdensome than necessary to redress the complaining parties." *Bresgel v. Brock*, 843 F.2d 1163, 1170 (9th Cir. 1987) (citing *Califano v. Yamasaki*, 442 U.S. 682, 702-705 (1979)). Thus, vacatur is never automatically required. For instance, if the Court were to find that the decision required further explanation, it retains discretion to remand without vacatur. See *Humane Soc'y v. Locke*, 626 F.3d 1040, 1053 n. 7 (9th Cir. 2010); *Idaho Farm Bureau Fed'n v. Babbitt*, 58 F.3d 1392, 1405-06 (9th Cir. 1995) *Heartland Reg'l Medical Ctr. v. Sebelius*, 566 F.3d 193, 198 (D.C. Cir. 2009) (remand without vacatur may be appropriate "[w]hen an agency may be able readily to cure a defect in its explanation of a decision"); *United States v. Afshari*, 426 F.3d 1150, 1156 (9th Cir. 2005). The 2014 Final Rule and BiOp address multiple fisheries in multiple regions and a broad array of different management measures. It is far from obvious that any possible alleged deficiency in the agency's EIS or BiOp would necessarily require the disruptive step of vacating the entire rule. Given the complexity of the 2014 Final Rule and BiOp, it is difficult to address in the abstract what an appropriate remedy for a hypothetical violation would be. Should the Court rule against Federal Defendants on any claim, it should provide an opportunity for additional briefing on remedy, as it did in the prior Steller sea lion litigation.

CONCLUSION

For the reasons stated above, Plaintiffs' claims are meritless and should be rejected. NMFS's thorough NEPA review, and its carefully considered Biological Opinion, were reasonable and fully lawful. The issuance of the 2014 Final Rule appropriately addressed the complex challenges of managing the important groundfish fisheries, while going to great lengths to disclose environmental impacts and protect Steller sea lion prey availability. These actions should be affirmed.

Dated this 14th day of May, 2015.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 14th of May, 2015, I electronically filed the document to which this Certificate of Service is attached with the Clerk of the Court using the CM/ECF System, which will send notification of such filing to all attorneys of record.

/s/ Tanya C. Nesbitt

Tanya C. Nesbitt

TABLE OF EXHIBITS		
Ex.	Description	AR Bates Nos.
1	NPFMC, Fishery Management Plan for the Groundfish of the BSAI Management Area (2013) (excerpts) (BSAI FMP)	6015344- 6015353, 6015371
2	NMFS, Endangered Species Act – Section 7 Consultation Biological Opinion on the Authorization of Groundfish Fisheries under the Fishery Management Plans for the BSAI Management Area and the Gulf of Alaska (Nov. 24, 2010) (excerpts) (2010 BiOp)	1054121- 1054593
3	Trites, Andrew et al., Bottom-up forcing and the decline of the Steller sea lions (<i>Eumetopias jubatus</i>) in Alaska: assessing the ocean climate hypothesis, <i>Fisheries Oceanography</i> 16:1, 46-67 (2007) (Trites et al. 2007)	6003950- 6003971
4	Balsiger, Jim, NMFS, Revisions to the Steller Sea Lion Protection Measures for the Bering Sea and Aleutian Islands Management Area Groundfish Fisheries. Environmental Assessment/Regulatory Impact Review. (November 2010) (excerpts) (2010 EA)	3075927- 3075942
5	Olson, Eric A., NPFMC Chairman, Letter to Balsiger, Jim, NMFS, Alaska Region, Re: 2010 Biological Opinion (December 23, 2010) (NPFMC Letter)	4000977- 4000978
6.1	NMFS, Record of Decision, Steller Sea Lion Protection Measures for Groundfish Fisheries in the Bering Sea and Aleutian Islands Management Area Final Environmental Impact Statement. Part 1 (November 2014)	2001119- 2001128
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12	Lander, Michelle et al., At sea distribution of Steller sea lions in the western-central Aleutian Islands (August 1, 2013) (Lander et al. 2013)	6012667- 6012685
13	NMFS, Final Environmental Impact Statement, Steller Sea Lion Protection Measures for Groundfish Fisheries in the Bering Sea and Aleutian Islands Management Area, Vol. I, II (May 2014) (excerpts) (FEIS)	3078126, 3153709, 3153769, 3153786, 3154158, 3160431, 3160455, 3160750, 3078662-768, 3153770-71, 3153777-80, 3153792-93, 3153845-940, 3154047-322, 3154117-18, 3154142-251
14	NMFS PRD, Analytical Approach for the Grounfish BiOp (May 2013) (Analytical Approach) plus Errata Sheet	1018016- 1018028, 1019125
15	Balsiger, Jim, NMFS, Alaska Region (AKR), Memorandum Re: Biological Opinion on Steller Sea Lions and the Alaska Groundfish Fisheries (Apr. 1, 2014) (Balsiger Memo)	1044536- 1044537
16	Pup/ Nonpup ratios in WDPS Steller sea lion population. (August, 2013) (Johnson and Fritz 2013)	6012538- 6012556
17	Johnson, Devin and Fritz, Lowell AFSC/NMML (in review) agTrend: An R package for estimating trends of aggregated abundance	6004235- 6004254
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25	McDermott, Susanne F. and Haist, Vivian. Evaluating the efficacy of trawl exclusion zones for preserving prey fields of Steller sea lions foraging on Atka mackerel. I: Atka mackerel local abundance and movement patterns relative to trawl exclusion zones. (McDermott and Haist (in review))	6025937- 6025967
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