No. 17-_____

In The
Supreme Court of the United States

ALASKA OIL AND GAS ASSOCIATION,
AMERICAN PETROLEUM INSTITUTE,

Petitioners,

v.

WILBUR L. ROSS, Secretary of Commerce,

Respondent.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Ninth Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

Under Section 4 of the Endangered Species Act, 16 U.S.C. § 1533(a), the National Marine Fisheries Service ("NMFS") must list a species as "threatened" with extinction if that species is "likely" to face an imminent threat of extinction within the "foreseeable future." This listing decision is the gateway to a host of significant protections, immediately transforming the conservation of that species into a national priority, including "priority over the 'primary missions'" of all federal agencies. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 185 (1978).

At issue in this case is NMFS's decision to list a healthy and abundant species as presently "threatened" with extinction based on the agency's speculation as to whether and how that species will adapt (or not) to climate-related habitat impacts projected by the agency to occur by the end of this century. As framed by the Ninth Circuit, the question presented is:

> When [the government] determines that a species that is not presently endangered will lose its habitat due to climate change by the end of the century, may NMFS list that species as threatened under the Endangered Species Act?

App. 6.

RULES 14.1 AND 29.6 STATEMENT

Plaintiffs-Appellees below and Petitioners here are the Alaska Oil and Gas Association and the American Petroleum Institute.

Additional Plaintiffs-Appellees below were the State of Alaska, Arctic Slope Regional Corporation, the North Slope Borough, NANA Regional Corporation, Inc., the Inupiat Community of the Arctic Slope, and the Northwest Arctic Borough. These entities have filed their own petition for certiorari with the Court.

Petitioner Alaska Oil and Gas Association is a non-profit trade association representing the oil and gas industry in Alaska. No parent corporation or publicly held company has a 10 percent or greater ownership interest in the Alaska Oil and Gas Association.

Petitioner American Petroleum Institute is a non-profit trade association representing the oil and gas industry in the United States. No parent corporation or publicly held company has a 10 percent or greater ownership interest in the American Petroleum Institute.

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INTRODUCTION

The global population of the bearded seal numbers nearly one million, with the U.S. Arctic population (called the Beringia distinct population segment) estimated at 155,000 seals. The bearded seal has persisted for 11 million years, through enormous swings in Earth's climate, including ice-free conditions in the Arctic. The bearded seal's current population estimates are the highest in recent history, and the seal has shown no evidence of a population decline or any other demographic or biological effect in response to shrinking Arctic sea ice trends. The International Union for Conservation of Nature ("IUCN") – the entity recognized as the most comprehensive apolitical organization for evaluating the conservation status of plant and animal species – categorizes the bearded seal as "Least Concern," along with other ubiquitous species such as the common coyote and the white-tailed deer.[1]

Despite these undisputed facts, the National Marine Fisheries Service ("NMFS") listed the U.S. population of the bearded seal as "threatened" with extinction under the Endangered Species Act ("ESA"). NMFS did so based *solely* on climate change models that predict continued Arctic sea ice declines through the end of the 21st century. Critically, NMFS *conceded* (repeatedly) that it cannot predict whether or how the

[1] *See* The IUCN Red List of Threatened Species, Version 2017-1, http://www.iucnredlist.org/search (last visited July 18, 2017).

bearded seal will adapt to those modeled changes and that it has no evidence that the bearded seal has been unable to adapt to observed changes to Arctic sea ice. NMFS nonetheless decided that it was "likely" that the bearded seal will face an imminent threat of extinction in the foreseeable future. Never before has the ESA been applied in such a cavalier way to protect a species that has shown no negative reaction in response to an identified habitat threat, with admitted speculation as to how the species will react to that threat in the distant future.

The Ninth Circuit affirmed this decision by relying upon the ESA's requirement that agencies use the "best scientific and commercial data available" to dismissively excuse the *absence* of required information, explaining that NMFS does not need "ironclad" or "absolute" proof that a species is threatened with extinction. App. 19. It was enough for the Ninth Circuit that NMFS "candidly disclosed" that its decision was based on speculation as to how the bearded seal would react to future climate-driven habitat changes. App. 22. The Court also incorrectly held that "neither the ESA nor our case law requires the agency to calculate or otherwise demonstrate the 'magnitude' of a threat to a species' future survival before it may list a species as threatened." App. 29.

Petitioners agree with the State of Alaska et al. that this Court's review is needed to restore some effect to the clear statutory limits imposed on such listings by Congress's definition of a "threatened species."

We emphasize, however, that the unique record presented in this case, including the agency's repeated concessions of uncertainty, reinforce that conclusion and make this an excellent vehicle for review. The Ninth Circuit has ignored this Court's instruction that the primary purpose of the ESA's "best scientific and commercial data" requirement is "to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise." *Bennett v. Spear*, 520 U.S. 154, 176 (1997). This is precisely what the decision below endorses and promotes. According to the Ninth Circuit, NMFS is not required to determine the magnitude of the risk faced by a species and can substitute speculation for evidence so long as the speculation is candidly disclosed. This sort of unfettered discretion is not only contrary to the ESA, but also to basic limits on agency rulemaking under the Administrative Procedure Act ("APA"). Supreme Court review is needed to conform the law in the Ninth Circuit to the ESA, the APA, and this Court's instructions in *Bennett*.

Additionally, Supreme Court review is urgently needed because the Ninth Circuit's decision to drastically lower (if not entirely remove) the evidentiary threshold required to list a species under the ESA has significant and immediate practical consequences. The threshold decision as to whether to list a species as threatened or endangered is the gateway to a panoply of stringent protections that can (and commonly do) lead to substantial economic consequences for states, tribes, and the regulated community. The ESA requires listed species protection at "whatever the cost." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978). As

discussed below, that cost often manifests as severe economic dislocation by elevating species protection over economic, property, and even liberty interests.

These draconian protections were intended for those species truly threatened with extinction. Under the Ninth Circuit's standard, these protections can now be extended to a species with no consideration of the magnitude of the risk faced by the species and based solely on speculation as to what *might* happen at the end of the century. The ESA's stringent protections were not intended for such an unpurposed application.

The Petition should be granted to address these important issues.

PETITION FOR A WRIT OF CERTIORARI

Petitioners Alaska Oil and Gas Association ("AOGA") and American Petroleum Institute ("API") respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Ninth Circuit in this case.

OPINIONS BELOW

The opinion of the court of appeals (App. 1-33) is reported at 840 F.3d 671. The opinion of the district court (App. 34-79) is available at 2014 WL 3726121.

JURISDICTION

The judgment of the court of appeals was entered on October 24, 2016. After the court of appeals extended the time to file, Petitioners filed a timely petition for rehearing en banc on January 9, 2017. By order dated February 22, 2017, the court denied the petition for rehearing en banc. App. 80. On May 12, 2017, Justice Kennedy extended the time for filing petitions for certiorari to July 22, 2017. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS

16 U.S.C. § 1532(20) defines "threatened species" as follows:

> The term "threatened species" means any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

16 U.S.C. § 1532(6) defines "endangered species" as follows:

> The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this chapter would present an overwhelming and overriding risk to man.

16 U.S.C. § 1533(a)(1) provides in relevant part:

> The Secretary shall by regulation promulgated in accordance with subsection (b) determine whether any species is an endangered species or a threatened species because of any of the following factors:
>
> (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
>
> (B) overutilization for commercial, recreational, scientific, or educational purposes;
>
> (C) disease or predation;
>
> (D) the inadequacy of existing regulatory mechanisms; or
>
> (E) other natural or manmade factors affecting its continued existence.

16 U.S.C. § 1533(a)(3)(A)(i) provides in relevant part:

> The Secretary . . . shall, concurrently with making a determination under paragraph (1) that a species is an endangered species or a threatened species, designate any habitat of such species which is then considered to be critical habitat[.]

16 U.S.C. § 1533(b)(1)(A) provides in relevant part:

> The Secretary shall make determinations required by subsection (a)(1) solely on the basis of the best scientific and commercial data available to him after conducting a review of

> the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction; or on the high seas.

STATEMENT OF THE CASE

A. The ESA Imposes Significant Protections for Species in Danger of or Threatened with Extinction.

Congress enacted the ESA in 1973 in response to a rise in the number and severity of threats to the world's wildlife, with the intent of preserving threatened and endangered species and the habitat upon which they depend. *See Tenn. Valley Auth.*, 437 U.S. at 177. The stated purpose of the ESA is to ensure the conservation of "species of fish, wildlife, and plants [that] have been so depleted in numbers that they are in danger of or threatened with extinction." 16 U.S.C. § 1531(a)(2).

The ESA imposes significant protections for species listed as threatened or endangered. Protection of threatened and endangered species must be the "first priority" of every federal agency "whatever the cost." *Tenn. Valley Auth.*, 437 U.S. at 184-85. Section 7(a)(1) of the ESA places a mandate on every federal agency to "utilize their authorities in furtherance of the

purposes [of the ESA] by carrying out programs for the conservation of endangered species and threatened species." 16 U.S.C. § 1536(a)(1). Section 7(a)(2) of the ESA further requires federal agencies to "insure that any action authorized, funded, or carried out by such agency" will not "jeopardize the continued existence" of a threatened or endangered species. *Id*. § 1536(a)(2). To fulfill that mandate, federal agencies must "consult" with the NMFS (for marine species) and the U.S. Fish and Wildlife Service ("FWS") (for terrestrial species). *Id*.

The ESA also requires NMFS and FWS (the "Sevices") to designate "critical habitat" for threatened and endangered species. In practice, these designations can encompass hundreds of thousands of square miles (for a single species), protecting that habitat from actions that could "result in the destruction or adverse modification" of that habitat. *Id*. § 1536(a)(2).

In addition to these protections, the ESA prohibits the "take" of endangered species, making it illegal to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such species, "or attempt to engage in any such conduct." *Id*. § 1532(19). This prohibition can be extended to threatened species. *Id*. § 1533(d). Violation of the take prohibition can result in civil and criminal penalties and incarceration. *Id*. § 1540.

The ESA also appropriately constrains the process and criteria for deciding which species can qualify for

these protections. Congress expressly defined an "endangered species" as "any species which *is in danger of extinction* throughout all or a significant portion of its range," and a "threatened species" as one that "is *likely to* become an endangered species within the *foreseeable* future." *Id*. §§ 1532(6), 1532(20) (emphases added). Furthermore, Congress set forth express listing criteria, *id*. § 1533(a)(1), and a detailed decision-making process, *id*. § 1533(b). Congress required that the decision to place a species on the threatened or endangered list must be based "solely on the best scientific and commercial data available." *Id*. § 1533(b)(1)(A).

The underlying intent of all these requirements is to limit the ESA to those species that are truly in need of protection. *See id.* § 1531(a)(2) (ESA is intended to ensure conservation of "species of fish, wildlife, and plants [that] have been *so depleted in numbers* that they are in danger of or threatened with extinction" (emphasis added)). The ESA's protections are needed because "*the decline and disappearance* of species and subspecies is a matter of national and international concern, and that it is necessary . . . to reverse this decline." H. Rep. No. 93-412 (1973), *reprinted in* 1 Cong. Research Serv., A Legislative History of the Endangered Species Act of 1973, as amended in 1976, 1977, 1978, 1979, and 1980, Serial No. 97-6, at 140, 148 (1982) (emphasis added).

Historically, NMFS and FWS have made reasonable efforts to comply with the letter and spirit of the ESA in their listing decisions by requiring identification of threats of sufficient magnitude to warrant inclusion of the species on the list. As NMFS and FWS have repeatedly explained:

> [M]ere identification of factors that *could* impact a species negatively is not sufficient to compel a finding that listing is appropriate; we require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of endangered or threatened under the Act.

79 Fed. Reg. 11,053, 11,070 (Feb. 27, 2014) (emphasis added).[2] This threat assessment necessarily entails an evaluation of the "magnitude" of risks facing a species.[3]

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[2] Many listing decisions use identical language. *See, e.g.*, 79 Fed. Reg. 8656, 8665 (Feb. 13, 2014); 79 Fed. Reg. 10,236, 10,257 (Feb. 24, 2014); 79 Fed. Reg. 7136, 7150 (Feb. 6, 2014).

[3] *See, e.g*., 81 Fed. Reg. 22,710, 22,772 (Apr. 18, 2016) (declining to list fisher because threats are "not of sufficient imminence, intensity, or magnitude"); 80 Fed. Reg. 76,068, 76,101, 76,104-05 (Dec. 7, 2015) (recognizing need to "determin[e] the magnitude of threats" acting on a species before listing); 79 Fed. Reg. 77,998, 78,012 (Dec. 29, 2014) ("Ocean acidification and climate change impacts could affect pinto abalone in the future; however, the magnitude, scope, and nature of these effects are highly uncertain at this time."); 79 Fed. Reg. 74,954, 74,978 (Dec. 16, 2014) ("[T]he likelihood and magnitude of threats from climate change . . . must be examined . . . to fully assess extinction risk.").

B. The Listing of the Bearded Seal.

NMFS's decision to list the bearded seal did not follow the Services' established approach to ESA listings. NMFS decided to use an end-of-century "foreseeable future," coupled with modeling showing that "sea ice will decrease substantially" towards the end of the 21st century. 77 Fed. Reg. 76,740, 76,759 (Dec. 28, 2012). NMFS found that although the "general direction of the [warming climate] trend is widely accepted . . . [t]here is little or no similar consensus about the biological responses [by bearded seals] that are most likely to follow the physical habitat changes." *Id*. at 76,755. NMFS conceded that such biological responses are "highly uncertain." *Id*. NMFS conceded that while "sea ice in the Arctic has been in decline for a number of years" it had no data showing that the bearded seal population had suffered any effect from that decline. *Id.* at 76,759-60. NMFS conceded that the "degree of risk posed by the threats associated with the impacts of global climate change on bearded seal habitat *is uncertain* due to a lack of quantitative information linking environmental conditions to bearded seal vital rates, and a lack of information about how resilient bearded seals will be to these changes." *Id*. at 76,747 (emphasis added). NMFS also conceded that "[d]ata were not available to make statistically rigorous inferences about how [the bearded seal] will respond to habitat loss over time" and that assessing the probability of extinction within a specified time frame is "not possible." *Id*. at 76,757-58.

Despite this acknowledged lack of supporting information, NMFS listed the bearded seal as threatened with extinction under the ESA, thereby triggering the immediate protections of the Act.

C. The District Court Vacated the Listing Decision.

A coalition of stakeholders, including the State of Alaska, Alaska Native Corporations, and other Alaska Native groups, along with AOGA and API, challenged the listing decision in federal district court.

The district court recognized that the listing decision "relied principally, if not solely, upon climate change as the governing factor for listing" the bearded seal as threatened. App. 61-62. The court also recognized that NMFS "concede[d] that, at least through [the] mid-21st century, there will be sufficient sea-ice to sustain the" bearded seal, and that the earliest potential problem was not until 2090. App. 76-77. Even then, the court explained, "NMFS acknowledges that it lacks any reliable data as to the actual impact on the bearded seal population as a result of the loss of sea-ice." App. 77. Under these circumstances, it was "simply too speculative and remote to support a determination that the bearded seal is in danger of becoming extinct." *Id*. Accordingly, the district court vacated the listing decision.

The Ninth Circuit reversed. The Ninth Circuit was unmoved by NMFS's admitted lack of supporting information. Instead, the Ninth Circuit concluded that

NMFS was merely required to "identify the limits of th[e] data" when making the determination and that the "ESA does not require more." App. 21-22. The Ninth Circuit also held that an agency need not "demonstrate the 'magnitude' of a threat to a species' future survival before it may list a species as threatened." App. 29.

REASONS FOR GRANTING THE PETITION

The question presented in this case implicates the most important inquiry that arises in the federal government's administration of the ESA: whether a species is entitled to the Act's many protections or not. The ESA requires the use of the "best scientific and commercial data" in answering that inquiry, and that standard acts as an important check against arbitrary application of the Act's protections. Twenty years ago, this Court cautioned that the purpose of this standard is to ensure that the Act would "not be implemented haphazardly, on the basis of speculation or surmise." *Bennett*, 520 U.S. at 176.

The Ninth Circuit's decision ignores that warning, allowing NMFS to list a species despite the agency's admitted lack of data to predict with any modicum of certainty how the species will respond to a habitat-related threat projected to manifest by the end of the century. In so doing, the Ninth Circuit improperly excused NMFS from providing the information required

to determine that the bearded seal meets the "threatened species" standard because the agency "candidly disclosed" its uncertainty and lack of supporting data. This application of the ESA is incompatible with the instructions provided by this Court in *Bennett*, and by the D.C. Circuit, to agencies faced with uncertainty and a lack of data when making decisions under the ESA.

In addition, as comprehensively demonstrated by the parallel petition filed by the State of Alaska et al., the Ninth Circuit's holding cannot be reconciled with the plain language, intent, structure, and implementation of the ESA. Below, we emphasize how one particularly erroneous aspect of the Ninth Circuit's holding misapplies the ESA's requirement that a "threatened" species is "*likely to* become an endangered species within the foreseeable future." 16 U.S.C. § 1532(20) (emphasis added). Specifically, by excusing NMFS from assessing the magnitude of the threat to the bearded seal, the Ninth Circuit reads the term "likely" out of the threatened species definition. Indeed, if NMFS need not assess the magnitude of the identified threat, then there is no basis upon which it can rationally determine the likelihood of endangerment resulting from that threat.

Finally, review is warranted because the answer to the threshold question as to whether a species qualifies for ESA listing can trigger substantial, far-reaching economic and regulatory consequences for

the federal government, states, tribes, and the regulated public. A listing decision shapes every subsequent federal action in the range of that species; requires expenditures of considerable conservation resources; exposes the federal government, states, tribes, and the regulated public to lawsuits and injunctions and civil and criminal liability; and ultimately elevates species protection over basic property and liberty rights. Supreme Court review is essential to ensure that these protections are properly limited, as Congress intended, to those species truly in need of the ESA's special protections.

A. The Ninth Circuit's Erroneous Interpretation of the ESA Is Incompatible with Well-Established Standards Set by This Court and the D.C. Circuit.

The Ninth Circuit upheld NMFS's listing decision – despite the fact that NMFS conceded that it does not know the "magnitude" of the risk posed by alleged climate change impacts to the bearded seal and that it lacked information to predict how the bearded seal will respond to projected climate changes – because NMFS "candidly disclosed" the limits of the available information. App. 22. Supreme Court review is warranted because the Ninth Circuit interpreted and applied the ESA's "best scientific and commercial data available" standard in an untenable manner that undermines important principles established in the decisions of this Court and the D.C. Circuit. This holding turns the

ESA's standard on its head, converting a measure intended to protect the public from excessive agency action into a means for insulating agency action from judicial review.

1. The Ninth Circuit's decision is inconsistent with the essential checks on ESA agency action established by this Court in *Bennett*. In *Bennett*, the Court reviewed the meaning of the ESA in the context of a Section 7(a)(2) consultation. *Bennett*, 520 U.S. at 157-58. As discussed above, the purpose of a Section 7(a)(2) consultation is to determine whether a proposed agency action is likely to jeopardize the continued existence of a species listed as threatened or endangered under the ESA. Like the ESA's listing provisions, Section 7(a)(2) requires NMFS and FWS to "use the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2).

a. The plaintiffs in *Bennett* alleged that the available scientific and commercial data showed that the irrigation project under review would not have a detrimental impact on the endangered sucker fish, and that the FWS had violated the best scientific and commercial data requirement by making unsubstantiated findings to the contrary. *Bennett*, 520 U.S. at 176. The Court explained that the "obvious purpose of the requirement that each agency 'use the best scientific and commercial data available' is to ensure that the ESA not be implemented haphazardly, on the basis of speculation and surmise." *Id*. (quoting 16 U.S.C. § 1536(a)(2)). The Court further explained that while this requirement "no doubt serves to advance the

ESA's overall goal of species preservation, we think it readily apparent that another objective (if not indeed the primary one) is to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives." *Id.* at 176-77.

b. This reasoning applies with even greater force in the context of an ESA listing decision. Once a species is listed (as was the case for the sucker fish in *Bennett*), courts and agencies commonly give the listed species the "benefit of the doubt." *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1988) (citation omitted). But courts have uniformly rejected the notion that the "benefit of the doubt" standard applies to the threshold listing decision itself. *See, e.g.*, *Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 947 (D. Or. 2007).[4] Instead, if the "data is uncertain or inconclusive," the agency cannot list a species. *Id.* Otherwise, an ESA listing would be required every time "there is any *possibility* of [a species] becoming endangered in the foreseeable future." *Id.* (emphasis added). The ESA requires more; it expressly limits the listing of species to those that are "likely" to face extinction, not those that face a mere possibility of extinction. 16 U.S.C. § 1532(20).

c. Below, the Ninth Circuit was presented with a situation in which NMFS expressly conceded, *inter*

[4] *See also*, *e.g.*, *In re Polar Bear Endangered Species Act Listing & 4(d) Rule Litig.*, 794 F. Supp. 2d 65, 110 n.53 (D.D.C. 2011) ("CBD has cited no instance where a court has found that the Service was required to list a threatened species as endangered based on the 'benefit of the doubt' standard, nor is the Court aware of any such authority."), *aff'd*, 709 F.3d 1 (D.C. Cir. 2013).

alia, that it lacked data showing how the bearded seal "will respond to habitat loss over time" despite the fact that NMFS identified future habitat loss as the *only* supporting factor for its listing decision. 77 Fed. Reg. at 76,758. Without this critical information, NMFS's conclusion that the bearded seal will be on the brink of extinction by the end of the century is plainly based on speculation and surmise. This is precisely what the ESA's best science standard was designed to prevent.

The Ninth Circuit recognized the ESA's best scientific and commercial data standard but interpreted it in a manner that was not faithful to this Court's instructions in *Bennett*. According to the Ninth Circuit, the ESA's best science standard is satisfied so long as the agency "identif[ies] the limits of that data when making a listing determination" and NMFS satisfied this standard by "candidly disclos[ing] the limitations of the available data and its analysis." App. 21-22. In other words, NMFS satisfied its obligation to use the "best scientific and commercial data available" by "candidly" admitting that it was relying on speculation to reach its conclusion.

The Ninth Circuit's "candidly disclosed" standard eviscerates the "obvious purpose" of the ESA by allowing NMFS to list a species based on speculation and surmise. *Bennett*, 520 U.S. at 176. Even worse, the Ninth Circuit's holding turns the ESA's best science requirement into a shield to insulate agency action from meaningful review. Now, in the Ninth Circuit, NMFS can list a species as threatened or endangered (thereby elevating protection of a species to a national

priority) without data to support required findings that the species is actually at risk of extinction, so long as it candidly discloses that it lacks the data to do so. The ESA's best science requirement was intended to shield the public from overzealous agency action, not to shield overzealous agency actions from judicial review. *Id*. at 176-77 (best science standard is intended to avoid "needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives").

d. The Ninth Circuit's new standard is also contrary to basic principles of administrative law. This Court has warned that while agency expertise can be "the strength of modern government," courts must "make the requirements for administrative action strict and demanding," else that expertise "can become a monster which rules with no practical limits on its discretion." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 48 (1983) (citation omitted). Accordingly, an "agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *Id*. at 43 (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

Instead of holding NMFS to this "strict and demanding" standard, the Ninth Circuit blindly deferred to NMFS's expertise and championed the admitted lack of data and the substantial uncertainty as reasons to *uphold* the agency's decision. NMFS could not make

a "rational connection" because it admitted that essential information was unavailable to rationally support *any conclusion*. "[T]o make findings without facts is like building a house without a foundation." *Abbotts Dairies Div. of Fairmont Foods, Inc. v. Butz*, 389 F. Supp. 1, 10 (E.D. Pa. 1975). The ESA's best science requirement and basic principles of judicial review of agency action require more than such speculation. *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 48-49.

The Ninth Circuit further justified its position by claiming that the district court improperly required NMFS to support its decision with data that was "unobtainable." App. 26. However, this rationale sidesteps the ESA's requirement that the agency base its decision only on data that are *available*. If the *available* data are uncertain or inconclusive – as the agency admitted here – then a listing is improper because it would be based on speculation. The agency is not exempted from this requirement because *unavailable* data are supposedly "unobtainable." Moreover, in a case the Ninth Circuit purported to follow, the ESA listing of the polar bear was upheld based, in part, upon the very type of information the Ninth Circuit complained was "unobtainable." *See In re Polar Bear Endangered Species Act Listing & 4(d) Rule Litig.*, 794 F. Supp. 65, 74 (D.D.C. 2011), *aff'd*, 709 F.3d 1 (D.C. Cir. 2013). Principally, the court found that the FWS relied upon "long-term studies showing that these impacts" – including declines in physical condition and reproductive success – "had already been observed in some of the southern-most polar bear populations." *Id*.

The bearded seal, by contrast, has shown no impacts associated with sea-ice declines. 77 Fed. Reg. at 76,759-60 (conceding absence of studies similar to polar bear studies). The problem is not that data for the bearded seal are "unobtainable," but rather that data are *unavailable* because no impacts to the species have been observed and no assessment of the magnitude of the likely impact of future habitat loss on the species has been performed.[5] Without such data, NMFS could only rely on speculation and surmise, contrary to this Court's instruction in *Bennett*.

2. The error in the Ninth Circuit's "candidly disclosed" standard is also illustrated by the D.C. Circuit's decision in *Otay Mesa Prop., L.P. v. U.S. Dep't of Interior*, 646 F.3d 914, 914 (D.C. Cir. 2011). In *Otay Mesa*, the FWS designated critical habitat for the endangered fairy shrimp pursuant to ESA Section 4. The FWS claimed that certain lands were "occupied" at the time of listing (the relevant time frame) based on evidence that the species was subsequently found in a particular area. *Id*. at 917-18. The FWS expressly acknowledged the limitations of the available data in its administrative record. *Id*. (citing 72 Fed. Reg. 70,648, 70,664 (Dec. 12, 2007)). Plaintiffs challenged the designation, claiming that the designation was not

[5] When listing the polar bear as "threatened," the FWS relied upon an assessment that grouped 19 polar bear subpopulations into four "ecoregions" and applied two different models to forecast polar bear population sizes and trends in each ecoregion for three different future time frames, based upon the habitat changes predicted by the agency to occur as a result of climate change. *See* 73 Fed. Reg. 28,212, 28,272-76 (May 15, 2008).

supported by substantial evidence. *Id*. at 915. The FWS attempted to justify its thin record by arguing that the ESA requires the designation of critical habitat on the basis of the best scientific data available. *Id*. at 918. The FWS further claimed that it had "no affirmative obligation to conduct its own research to supplement existing data." *Id.*

The D.C. Circuit rejected these efforts to use the ESA's best science requirement to shield agency action from review. As the court explained, "the absence of a requirement for the Service to collect more data on its own is not the same as an authorization to act without data to support its conclusions, even acknowledging the deference due to agency expertise." *Id*. Rather, without that necessary data, the "'best scientific data available' fails to demonstrate, without further explanation, that plaintiffs' property was 'occupied'" by the species. *Id*. Accordingly, the Court invalidated the critical habitat designation.

The Ninth's Circuit's holding here is inconsistent with the D.C. Circuit's reasoning in *Otay Mesa*. Here, the Ninth Circuit did, in fact, authorize NMFS "to act without data to support its conclusions," simply because NMFS "candidly disclosed" that it had no data that supports its conclusions. App. 22. Although NMFS may not have been required to gather more data, it was not excused from the obligation to have actual data to support its conclusions in the first instance.

Supreme Court review is needed to address the Ninth Circuit's erroneous interpretation of the ESA.

The ESA's listing determination is supposed to be made on the basis of the best available science, not speculation and surmise. The Ninth Circuit's articulated standard allows NMFS to use the best available science requirement to shield agency action from review, in a manner contrary to the important principles announced by this Court and the D.C. Circuit. Review should be granted.

B. The Ninth Circuit's Decision Is Contrary to the ESA's Plain Language.

In addition to the statutorily based arguments set forth in the State of Alaska et al.'s parallel petition, we emphasize here one particular textual flaw in the Ninth Circuit's application of the ESA. Specifically, the ESA expressly requires NMFS to make a reasoned determination that a species is "likely to" become endangered in the foreseeable future before listing that species as threatened. 16 U.S.C. § 1532(20). As the Ninth Circuit correctly stated, "most dictionaries define 'likely' to mean that an event, fact, or outcome is probable." App. 29. However, the only way to determine that it is "probable" that a species will face extinction in the foreseeable future is to assess the *magnitude* of the threat to that species' survival (and indeed the Services have historically done so). *See supra* note 3.

To determine that a species is "likely" to become in danger of extinction, NMFS must therefore do more than merely identify a projected threat to the species. NMFS must also evaluate the magnitude of the threat

to the species' future survival because, without this evaluation, NMFS lacks the information necessary to rationally determine whether the species will *likely* be on the brink of extinction at some future point in time. However, here, NMFS admitted that it had *no information* to assess the magnitude of the identified threat (climate-related habitat loss) or the species' response to that threat. Absent this information, NMFS's decision is arbitrary because it necessarily relies upon an interpretation of 16 U.S.C. § 1532(20) that reads the term "likely" out of the statute. *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001) ("It is a cardinal principle of statutory construction that a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant." (internal quotation marks and citation omitted)).

The Ninth Circuit made matters worse by expressly sanctioning NMFS's failure. The Ninth Circuit held that "neither the ESA nor our case law requires the agency to calculate or otherwise demonstrate the 'magnitude' of a threat to a species' future survival before it may list a species as threatened." App. 29. Thus, in the Ninth Circuit, an agency may list a species by merely identifying a threat to a species, regardless of whether the magnitude of that threat – however large or insignificant – will be sufficient to render the species "likely" to become extinct in the foreseeable future. Supreme Court review is needed to correct the Ninth Circuit's misinterpretation of the ESA's plain language.

C. The Court Should Accept Review to Address the Important Consequences of the Ninth Circuit's Unprecedented Application of the ESA.

In addition to the reasons addressed above, review is warranted to address important issues regarding the reach and scope of the ESA. There is no dispute that the decision to list a species has drastic and immediate consequences. *See Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687, 708 (1995) ("[A]s all recognize, the [ESA] encompasses a vast range of economic and social enterprises and endeavors."). Since its inception, the ESA has been a lightning rod, with this Court affirming in 1978 that the ESA requires all "agencies to afford first priority to the declared national policy of saving endangered species." *Tenn. Valley Auth.*, 437 U.S. at 185. The present case decides what limitations, if any, are placed on NMFS's ability to extend those protections to species based on potential future harms.

1. The Ninth Circuit's lax standard for listing species will have palpable consequences for both public and private entities. The ESA is widely considered the "most powerful environmental statute in existence today" and the "pitbull" of environmental law. Deanne M. Barney, *The Supreme Court Gives an Endangered Act New Life:* Bennett v. Spear *and Its Effect on Endangered Species Act Reform*, 76 N.C. L. Rev. 1889, 1893 & n.32 (1998) (citation omitted). The ESA has sharp teeth with broad economic and regulatory ramifications.

a. One economic consequence is that an ESA listing immediately triggers conservation obligations for a species. For example, the ESA requires NMFS and FWS to develop a recovery plan for every listed species with the purpose of bringing that species to the point at which the protections of the ESA are no longer required. 16 U.S.C. § 1533(f)(1). These conservation plans come at an enormous cost. The recovery plan for Elkhorn and Staghorn coral (in U.S. waters alone) is estimated to cost "$254,540,000+," which "represents an extreme underestimate for the actual cost of recovery." U.S. Dep't of Commerce et al., Recovery Plan: Elkhorn coral (Acropora palmata) and Staghorn coral (A. cervicornis), at xiv (Mar. 2015), http://www.nmfs.noaa.gov/pr/recovery/plans/final_acropora_recovery_plan.pdf. The Snake River sockeye recovery plan will take "50 to 100 years" to implement, with the cost of the first 25 years at over $100 million. NOAA Fisheries, ESA Recovery Plan for Snake River Sockeye Salmon (Oncorhynchus nerka), at 57 (June 8, 2015), http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/interior_columbia/snake/snake_river_sockeye_recovery_plan_june_2015.pdf. The Oregon Coast coho recovery plan will require $55 million in the next five to 10 years, and $110 million overall. NOAA Fisheries, Final ESA Recovery Plan for Oregon Coast Coho Salmon (Oncorhynchus kisutch), at S-10 (Dec. 2016), http://www.nmfs.noaa.gov/pr/recovery/plans/final_oc_coho_recovery_plandec_20.pdf. The Puget Sound salmon recovery plan was projected to cost $1.1 billion from 2006 to 2015 (and notably has resulted in no delistings as of today). Shared

Strategy Development Committee, Puget Sound Salmon Recovery Plan vol. 1, at 460 (Jan. 19, 2007), http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/puget_sound/chinook/pugetsoundchinookrecoveryplan.pdf. And this is just a handful of the many species entitled to recovery plans.

The Ninth Circuit's decision will only increase the burden on agencies to develop costly recovery plans for listed species. A recovery plan sets forth the "actions" needed to conserve the species, and the "criteria" used to measure when a species is recovered. 16 U.S.C. § 1533(f)(1). For species such as the bearded seal, which is presently highly abundant, occupies its entire historical range, and has exhibited no declines in fitness or abundance, the development and implementation of a recovery plan is a nonsensical (but very expensive) exercise because there is no status to be "recovered." Congress did not intend for such a waste of limited conservation resources.

b. The financial impacts of a listing decision go well beyond conservation spending. The listing of the delta smelt in California resulted in a massive disruption to California's economy. The listing ultimately led to an irrigation water shutdown, resulting in $2.2 billion in crop and other losses, leaving 300,000 to 400,000 acres unplanted, and causing severe economic dislocation to local communities. *See* Kyle Roberson, *One Fish, Two Fish, More Fish, No Water: Granting an Exemption Under the Endangered Species Act Due to Economic Woes in the Central Valley of California*, 19

San Joaquin Agric. L. Rev. 169, 173 (2010). As California's governor explained, the plan to protect the listed fish under the ESA "puts fish above the needs of millions of Californians and the health and security of the world's eighth largest economy." Jason Dearen, *Feds release plan to protect chinook salmon*, The San Diego Union-Tribune, June 4, 2009, http://www.sandiegounion tribune.com/sdut-ca-disappearing-salmon-060409-2009 jun04-story,amp.html.

Similar consequences can be seen throughout the country. The ESA listing of the spotted owl nearly crippled the timber industry in Washington and Oregon. *See* Timothy Egan, *Clinton, Planning Forest Conference, Hopes to Free Logjam in Northwest*, The N.Y. Times, Mar. 27, 1993, http://www.nytimes.com/1993/03/27/ us/clinton-planning-forest-conference-hopes-to-free-logjam-in-northwest.html?pagewanted=all. The water shut-offs in the Klamath River Basin to protect the sucker fish cost the local economy about $222 million in 2001 alone. *See* Congressional Research Service, Klamath River Basin Activities: An Overview, at 11 (Sept. 22 2005), http://nationalaglawcenter.org/wp-content/ uploads/assets/crs/RL33098.pdf. The ESA has been used to enjoin commercial fishing operations in Alaska, *Greenpeace v. Nat'l Marine Fisheries Serv.*, 106 F. Supp. 2d 1066, 1068 (W.D. Wash. 2000); prohibit snowmobiling on federal lands, *Defs. of Wildlife v. Martin*, 454 F. Supp. 2d 1085 (E.D. Wash. 2006); mandate the spill of water over dams (rather than generate hydropower), *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 422 F.3d 782, 788 (9th Cir. 2005); prohibit the

Federal Emergency Management Agency from issuing flood insurance to homeowners, *Florida Key Deer v. Brown*, 386 F. Supp. 2d 1281, 1294 (S.D. Fla. 2005); enjoin the Army Corps of Engineers' operation of the Missouri River, *Am. Rivers v. U.S. Army Corps of Eng'rs*, 271 F. Supp. 2d 230, 236 (D.D.C. 2003); halt grazing activities, *W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 477 (9th Cir. 2011); shut down pipeline operations, *Mont. Wilderness Ass'n v. Fry*, 408 F. Supp. 2d 1032, 1039 (D. Mont. 2006); and enjoin military operations, *Nat. Res. Def. Council, Inc. v. Evans*, 232 F. Supp. 2d 1003, 1012 (N.D. Cal. 2002). The impacts of ESA listing decisions touch every aspect of our economy.

c. ESA listings also trigger numerous regulatory consequences both within and beyond the ESA. For example, the listing decision mandates the designation of critical habitat for each species. *See* 16 U.S.C. § 1533(a)(2). Critical habitat designations can be enormous. The polar bear critical habitat designation is 187,157 square miles (75 Fed. Reg. 76,086, 76,109 (Dec. 7, 2010)), the loggerhead turtle critical habitat designation is 317,000 square miles (79 Fed. Reg. 39,856, 39,893-912 (July 10, 2014)), and the proposed ringed seal critical habitat designation is 350,000 square miles (79 Fed. Reg. 73,010 (Dec. 9, 2014)). That is almost *one million* square miles for *just three species* (of the approximately 2,000 species required to have critical habitat designations). By comparison, the entire terrestrial United States is about 3.8 million square miles.

The ESA also triggers a duty to consult with NMFS or FWS on every federal action that "may affect" listed species. *See* 50 C.F.R. § 402.14. Given the large number of ESA-listed species and expansive critical habitat designations, virtually every significant federal action requires some level of ESA consultation. This can require exhausting and expensive biological assessments, biological opinions, and reasonable and prudent alternatives for each listed species. 16 U.S.C. § 1536(b), (c). All of these measures impose substantial costs on agencies and applicants for federal approvals.

An ESA listing also triggers obligations under other statutes. An ESA listing for any marine mammal (like the bearded seal here) automatically triggers "depleted" status under the Marine Mammal Protection Act (despite the fact that the bearded seal is abundant). *Id*. §§ 1362(1)(C), (19)(C). There are myriad other consequences of a listing decision, including restrictions on commercial fishing operations under the Magnuson-Stevens Fishery Conservation and Management Act, *id*. § 1387; limiting the availability of fuel reduction projects, *id*. § 6512(a)(5); impacting the scope of Army Corps of Engineers review under the Clean Water Act, 33 U.S.C. § 2343(a)(5)(A)(iv); special consideration in setting pipeline locations, 49 U.S.C. § 60109(b)(2); impacting the availability of categorical exclusions under the National Environmental Policy Act ("NEPA"), 43 C.F.R. § 46.215(h); and influencing whether an action requires an environmental impact statement under NEPA, 40 C.F.R. § 1508.27.

d. The ESA even elevates species protection over basic property and liberty rights. For example, ranchers are told that they cannot take a listed species to protect their livestock (and their livelihoods). *See Christy v. Hodel*, 857 F.2d 1324, 1330, 1335 (9th Cir. 1988) (no constitutional right to protect livestock from threatened species, and no entitlement to compensation for the loss of property); *United States v. Charette*, No. CR 16-32-M-DLC, 2017 WL 1012974, at *1 (D. Mont. Mar. 15, 2017) (upholding conviction of man who shot grizzly bear to protect his horses). And although the ESA allows the taking of protected species in defense of human life, more than one person has been told by federal agencies and courts that dangerous situations like a grizzly bear entering the yard "[w]hile the children were playing" are not sufficient to meet this exception. *United States v. Wallen*, No. MJ L4-45-M-JCL, 2015 WL 1467446, at *1 (D. Mont. Mar. 30, 2015); *U.S. Fish & Wildlife Serv. v. Berthelson*, 7 O.R.W. 106, 115, 1993 WL 495700, at *7 (U.S. Dep't of Int. Office of Hearings & Appeals 1993) (reasonable fear that grizzly would return to area where grandchildren present not self-defense). These extreme protections were plainly intended to be reserved for species that are truly in need of special protection. *See Sweet Home Chapter*, 515 U.S. at 714 (Scalia, J., dissenting) (ESA take provisions can impose "financial ruin – not just upon the rich, but upon the simplest farmer who finds his land conscripted to national zoological use.").

All of these special protections and economic costs are entirely wasted and misplaced for a species, like

the bearded seal, that is presently thriving but subject to an alleged threat that stems from global factors indisputably beyond the ability of any one agency to control and that will not manifest (if at all) for many decades. This Court's review is essential to ensure that the ESA's significant protections are applied to those species with a demonstrated need to be on the list – not to every healthy species that could potentially be impacted by climate change within the century.

2. The Ninth Circuit's decision to radically lower the bar for listing also undermines the very purpose of the ESA. While the bearded seal faces no serious threat, there are many deserving species waiting to get on the list that cannot receive protection because agency funds and capacity are diverted elsewhere. The backlog of species waiting to be listed continues to grow, as evidenced by a recent multidistrict settlement setting a schedule to address listing petitions for more than 250 candidate species. *In re Endangered Species Act Section 4 Deadline Litigation-MDL No. 2165*, 704 F.3d 972 (D.C. Cir. 2013). Meanwhile, other species facing serious and immediate threats, where the "life or death of an entire species" hangs in the balance, are left without the protection of the ESA because the agencies have "limited resources." *Wildwest Inst. v. Kurth*, 855 F.3d 995, 1005 (9th Cir. 2017). Allowing (and even requiring) additional listings based on speculation – candidly disclosed or otherwise – only exacerbates this problem and undermines the purpose of the ESA.

Furthermore, the ESA was not intended to apply to highly abundant species like the bearded seal. As

one of the ESA's primary sponsors (Congressman Dingell) explained, highly abundant species like the "coyote" will not be placed on the list because "[w]e have plenty of coyotes." Cong. Rec. H11834, H1136 (Dec. 20, 1973). As Mr. Dingell assured other members of Congress, "[i]t simply will not happen." *Id*. Yet, the Ninth Circuit's decision now makes this possible. The IUCN places the bearded seal in the same low-risk, "least concern" category as the coyote. *See supra* note 1. The ESA's stringent protections do not help such a species, but they do impose considerable costs on the public. Supreme Court review is the only means to correct the Ninth Circuit's departure from the language and intent of the ESA.

3. Equally important, this case presents the perfect vehicle to set the Ninth Circuit's erroneous standard straight. Listing decisions often involve complicated and highly technical scientific facts, with litigants arguing over the adequacy of scientific data. In those cases, it is all too easy for NMFS or FWS to obfuscate the lack of sufficient evidence with claims of agency expertise and deference. This case presents no such complications. The essential facts here are conceded. NMFS conceded that it has *no data* to make a concrete inference about how the bearded seal will react to climate change and proceeded to list as threatened a highly abundant species that has shown no population decline despite observed sea ice declines. This is not a case involving the adequacy of contested facts. Instead, this case involves the question of whether the agency can proceed with a listing having

conceded it lacks data to determine with any modicum of certainty what the species' "likely" status will be in the foreseeable future. The error of such an approach will not be in sharper relief than is presented here.

Not only is this case a perfect vehicle for review, but review is essential at this time because many similar listing decisions are forthcoming. For example, NMFS recently listed the ringed seal as threatened, even though they "number in the millions" in the United States alone. 77 Fed. Reg. 76,706, 76,728 (Dec. 28, 2012). That listing decision is currently under the Ninth Circuit's review,[6] and subject to the Ninth Circuit's holdings that the ESA's best science requirement is satisfied by candid disclosure of the absence of evidence and that the ESA does not require any assessment of the magnitude of the risk posed to the species.

Moreover, issues involving climate change are becoming a more significant part of many listing petitions. *See*, *e.g.*, 81 Fed. Reg. 68,379 (Oct. 4, 2016) (stonefly); 81 Fed. Reg. 70,282 (Oct. 11, 2016) (four plants); 81 Fed. Reg. 71,670 (Oct. 18, 2016) (North American wolverine); 81 Fed. Reg. 85,488 (Nov. 28, 2016) (hyacinth macaw); 81 Fed. Reg. 88,639 (Dec. 8, 2016) (Gulf of Mexico Bryde's whale); 82 Fed. Reg. 4022 (Jan. 12, 2017) (Alabama shad); 82 Fed. Reg. 16,559 (Apr. 5, 2017) (yellow lance mussel). Under the Ninth Circuit's holding, species can be listed if climate change *could potentially* pose a threat and the agency

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[6] *See Alaska Oil and Gas Ass'n v. Pritzker*, Ninth Circuit Case Nos. 16-35380 & 16-35382.

"candidly discloses" that it does not have a factual basis to answer that question or otherwise elects not to assess the magnitude of the threat.

If the bearded seal meets the ESA's criteria for listing (as the Ninth Circuit held) – despite the admitted absence of evidence as to how the seal will adapt to habitat changes, despite the admitted absence of an impact from already observed habitat changes, despite its large population size, and despite the seal's occupation of its entire historical range – then virtually every species can qualify for listing. This absurd situation, and the severe regulatory consequences that follow, should not be allowed to persist. Only Supreme Court review can bring the Ninth Circuit's case law into conformity with the plain language and intent of the ESA and with this Court's jurisprudence. The Ninth Circuit has excused NMFS from its burden to affirmatively demonstrate that the ESA's listing standards are satisfied by turning the ESA's best science requirement into a shield for agencies and ignoring its intended "obvious purpose . . . to ensure that the ESA not be implemented haphazardly on the basis of speculation and surmise." *Bennett*, 520 U.S. at 176. Review should be granted.

CONCLUSION

For the above reasons, the Court should grant a writ of certiorari to review the judgment and opinion of the Ninth Circuit.

Respectfully submitted,

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APPENDIX A

FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

ALASKA OIL AND GAS ASSOCIATION; AMERICAN PETROLEUM INSTITUTE; STATE OF ALASKA; NORTH SLOPE BOROUGH; INUPIAT COMMUNITY OF THE ARCTIC SLOPE; NORTHWEST ARCTIC BOROUGH; ARCTIC SLOPE REGIONAL CORPORATION; NANA REGIONAL CORPORATION, INC.,
Plaintiffs-Appellees,

v.

PENNY PRITZKER, U.S. Secretary of Commerce; NATIONAL MARINE FISHERIES SERVICE; NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION; KATHRYN D. SULLIVAN, in her official capacity as the Acting Under Secretary of Commerce for Oceans and Atmosphere and the Acting Administrator, National Oceanic and Atmospheric Administration; SAMUEL D. RAUCH, III, in his official capacity as the Acting Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration,
Defendants-Appellants.

No. 14-35806

D.C. No.
4:13-cv-00018-RRB

ALASKA OIL AND GAS ASSOCIATION; AMERICAN PETROLEUM INSTITUTE; STATE OF ALASKA; NORTH SLOPE BOROUGH; INUPIAT COMMUNITY OF THE ARCTIC SLOPE; NORTHWEST ARCTIC BOROUGH; ARCTIC SLOPE REGIONAL CORPORATION; NANA REGIONAL CORPORATION, INC.,
Plaintiffs-Appellees,

v.

PENNY PRITZKER, U.S. Secretary of Commerce; NATIONAL MARINE FISHERIES SERVICE; NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION; KATHRYN D. SULLIVAN, in her official capacity as the Acting Under Secretary of Commerce for Oceans and Atmosphere and the Acting Administrator, National Oceanic and Atmospheric Administration; SAMUEL D. RAUCH, III, in his official capacity as the Acting Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration,
Defendants,

and

CENTER FOR BIOLOGICAL DIVERSITY,
Intervenor-Defendant-Appellant.

No. 14-35811

D.C. No. 4:13-cv-00018-RRB

OPINION

Appeal from the United States District Court
for the District of Alaska, Ralph R. Beistline,
District Judge, Presiding,

Argued and Submitted August 4, 2016,
Anchorage, Alaska

Filed October 24, 2016

Before: Raymond C. Fisher, Richard A. Paez
and Andrew D. Hurwitz, Circuit Judges.

Opinion by Judge Paez

SUMMARY*

Environmental Law

The panel reversed the district court's summary judgment in favor of plaintiffs in their action challenging federal officials' listing decision under the Endangered Species Act, concerning certain "sea ice seal" species; and held that the National Marine Fisheries Service's ("NMFS") listing decision was reasonable.

The NMFS concluded that the Okhotsk and Beringia distinct population segments of the Pacific bearded seal subspecies were likely to become endangered within the foreseeable future. NMFS used climate projections to determine that the loss of sea ice

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* This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

over shallow waters in the Arctic would leave the Pacific bearded seal subspecies endangered by the year 2095. Plaintiffs filed lawsuits challenging the listing decision under the ESA's citizen suit provision and the Administrative Procedure Act.

The panel held that in light of the NMFS's robust rulemaking process, and pursuant to a highly deferential standard of review, the NMFS's final rule listing the Beringia distinct population segment as threatened was not arbitrary or capricious, and its listing was supported by substantial evidence. Specifically, the panel held that the NMFS did not act arbitrarily or capriciously in concluding that the effects of global climate change on sea ice would endanger the Beringia distinct population segment in the foreseeable future. The panel further held that the administrative record demonstrated that NMFS provided a reasonable and evidence-based justification for its mid-century and end-of-century sea ice projections.

The panel held that NMFS clearly fulfilled its procedural and substantive obligations under Section 4(i) of the Endangered Species Act, 16 U.S.C. § 1533(i), to provide the State of Alaska with a written justification.

COUNSEL

Robert Parke Stockman (argued), Meredith L. Flax, Mary E. Hollingsworth, and Katherine W. Hazard, Attorneys; John C. Cruzen, Assistant Attorney General; Environment & Natural Resources Division, United

States Department of Justice, Washington, D.C.; Demian Schane, Office of the General Counsel, United States Department of Commerce, Juneau, Alaska; for Defendants-Appellants.

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Tyson C. Kade (argued), Van Ness Feldman LLP, Washington, D.C.; Matthew A. Love, Van Ness Feldman LLP, Seattle, Washington; for Plaintiffs-Appellees North Slope Borough, Inupiat Community of the Arctic Slope, Northwest Arctic Borough, Arctic Slope Regional Corporation, and NANA Regional Corporation, Inc.

OPINION

PAEZ, Circuit Judge:

The National Marine Fisheries Service ("NMFS") used climate projections to determine that the loss of

sea ice over shallow waters in the Arctic would leave the Pacific bearded seal subspecies (*Erignathus barbatus nauticus*) endangered by the year 2095. This case turns on one issue: When NMFS determines that a species that is not presently endangered will lose its habitat due to climate change by the end of the century, may NMFS list that species as threatened under the Endangered Species Act? The district court answered in the negative, ruling that NMFS's listing decision was arbitrary and capricious. We hold that on the basis of the administrative record, NMFS's listing decision is reasonable. Accordingly, we reverse the district court's grant of summary judgment in favor of Plaintiffs.

I.

In 2008, the Center for Biological Diversity ("CBD") filed a petition requesting that the Secretary of Commerce list three "sea ice seal" species as endangered or threatened under the Endangered Species Act ("ESA" or "the Act"), 16 U.S.C. §§ 1531-44. *See* 16 U.S.C. § 1533(b)(1)(3) (citing 5 U.S.C. § 553(e)) (relating to the process for consideration of a petition for rulemaking); Final Listing Rule: Threatened Status for the Beringia & Okhotsk Distinct Population Segments of the *Erignathus barbatus nauticus* Subspecies of the Bearded Seal, 77 Fed. Reg. 76,740 (Dec. 28, 2012) ("Listing Rule"). After a lengthy administrative process that included two rounds of peer review, several rounds of public notice and comment, and public hearings,

NMFS concluded that the Okhotsk and Beringia distinct population segments ("DPS") of the Pacific bearded seal subspecies (*Erignathus barbatus nauticus*) were "likely to become . . . endangered species within the foreseeable future throughout . . . a significant portion of [their] range." 16 U.S.C. § 1532(20); Listing Rule, 77 Fed. Reg. at 76,740.

Plaintiffs Alaska Oil and Gas Association ("AOGA"), the State of Alaska, and North Slope Borough (collectively, "Plaintiffs") filed separate lawsuits challenging the listing decision under the ESA's citizen suit provision, 16 U.S.C. § 1540(g), and the Administrative Procedure Act ("APA"), 5 U.S.C. § 706.[1] Plaintiffs alleged, *inter alia*, that the listing decision was not based on the "best scientific and commercial data available" in violation of 16 U.S.C. § 1533(b)(1)(A); the population of bearded seals was plentiful; a lack of reliable population data made it impossible to determine an extinction threshold; NMFS's use of predictive climate projections beyond 2050 were speculative; NMFS had unreasonably "changed tack" from its previous Arctic sea-ice listing decisions; and NMFS had failed to demonstrate a causal connection between the loss of sea ice and the impact of that loss to the Okhotsk and Beringia DPS's viability. In addition, the

[1] The American Petroleum Institute was added as a plaintiff in AOGA's amended complaint; the Inupiat Community of the Arctic Slope, Northwest Arctic Borough, Arctic Slope Regional Corporation, and NANA Regional Corporation were added as plaintiffs in the North Slope Borough's amended complaint. The district court consolidated all the cases and granted CBD leave to intervene as a defendant.

State of Alaska alleged that NMFS failed to adequately respond to its public comments and failed to comply with the ESA's state cooperation provisions. *See id.* § 1533(i); 50 C.F.R. § 424.18(c).

The district court denied relief with respect to the Okhotsk DPS for lack of Article III standing. *Alaska Oil & Gas Ass'n v. Pritzker*, No. 4:13-cv-18-RRB, 2014 WL 3726121, at *3-4 (D. Alaska July 25, 2014) ("*Pritzker*"). The district court, however, granted summary judgment to Plaintiffs on their challenge to NMFS's decision to list the Beringia DPS as a threatened species. The court concluded that NMFS's decision was arbitrary and capricious because NMFS's long-term climate projections were volatile and the agency lacked data on the bearded seal's adaptability and population trends, including "a specified time" at which the seal would reach an extinction threshold. *Id.* The district court also concluded that the ESA required NMFS to provide Alaska with a separate written justification for rejecting the State's comments and granted summary judgment to Alaska on that claim. *Id.* at *10 (citing *Alaska Oil & Gas Ass'n v. Salazar*, 916 F. Supp. 2d 974, 1003 (D. Alaska 2013), *rev'd sub nom.*, *Alaska Oil & Gas Ass'n v. Jewell*, 815 F.3d 544 (9th Cir. 2016) ("*Jewell*")). The district court vacated the Listing Rule, explaining that NMFS's attempt to predict the bearded seal's viability beyond 50 years was "too speculative and remote to support a determination that the bearded seal is in danger of becoming extinct." *Id.* at *15.

NMFS and CBD timely appealed. As we explain below, NMFS's decision to list the Beringia DPS as threatened was not arbitrary, capricious, or otherwise in contravention of applicable law. Accordingly, we reverse the district court's grant of summary judgment in favor of Plaintiffs.

II.

We review de novo the district court's grant of summary judgment to determine whether NMFS's ESA listing decision was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2); *Jewell*, 815 F.3d at 554. Our review is "deferential and narrow," requiring a "high threshold for setting aside agency action" following public notice and comment. *Id*. (internal quotation marks omitted). We presume an agency's action is valid, and we will affirm that action "so long as the agency 'considered the relevant factors and articulated a rational connection between the facts found and the choices made.'" *Id.* (quoting *Nw. Ecosys. All. v. U.S. Fish & Wildlife Serv.*, 475 F.3d 1136, 1140 (9th Cir. 2007)).

III.

In October 2009, NMFS established a Biological Review Team of eight marine mammal biologists, a fishery biologist, a marine chemist, and a climate scientist to review the status of the "best scientific and

commercial data available" regarding bearded seals.[2] Listing Rule, 77 Fed. Reg. at 76,740. NMFS solicited four scientists to conduct independent peer reviews of the Review Team's report. *Id.* at 76,740 & 76,750. Based on the Review Team's assessment and the peer reviewers' comments, NMFS published a proposed rule listing the Beringia and Okhotsk bearded seal DPSs as threatened under the ESA. *Id.*; *see also* Proposed Rule, 75 Fed. Reg. 77,496 (Dec. 10, 2010).

The status and peer review reports found that the bearded seal (*Erignathus barbatus*) lives throughout the Arctic and Northern Atlantic Oceans, including in the Chukchi, Beaufort, and Bering Seas; Sea of Okhotsk; Sea of Japan; and waters of Arctic Canada (Hudson and Baffin Bays), Svalbard (Norway), and Russia. Because bearded seals are widespread, have low population densities, and spend significant time under water, it is difficult to obtain a reliable estimate of their current population. Listing Rule, 77 Fed. Reg. at 76,742. The bearded seal is commonly divided into two subspecies[3] – *E. b. barbatus*, which primarily inhabits the Atlantic, and *E. b. nauticus*, which inhabits

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[2] The district court upheld the agency's rule listing the Okhotsk DPS, a ruling not contested on appeal. *Pritzker*, 2014 WL 3726121, at *3-4. Accordingly, we limit our review to the Beringia DPS listing.

[3] The ESA defines a species as "any subspecies of . . . wildlife . . . , and any distinct population segment of any species of . . . wildlife which interbreeds when mature." 16 U.S.C. § 1532(16). The Act does not define "distinct population segment." NMFS's policy, however, provides guidance on the factors the agency must consider before determining if a population is a distinct segment.

the Pacific. Noting that there were "regions of intergrading" between the Atlantic and Pacific subspecies, NMFS identified two distinct Pacific population segments. Proposed Rule, 75 Fed. Reg. at 77,499-501. One group lived exclusively in the Sea of Okhotsk (the Okhotsk DPS), and the remaining seals were found throughout the Bering and Chukchi Seas (the Beringia DPS), with very little mixing between the two groups. *Id.* at 77,500.

The review concluded that bearded seals generally prefer to hunt organisms found on the ocean floor. As a result, the seals prefer to congregate where non-contiguous sea ice floes appear over shallow water between 50 to 200 meters deep, and the seals avoid "unbroken, heavy, drifting ice or large areas of multi-year ice" located over deeper waters. *Id*. at 77,498. The seals use ice floes to give birth (whelp) and to nurse their pups; to allow mothers close access to food sources while nursing; to enable their pups to gain experience with diving, swimming, and hunting away from their predators; to provide a location for males to attempt to attract females; and to provide a platform where male seals can rest while molting. Listing Rule, 77 Fed. Reg. at 76,742-44. Year-round, bearded seals require access to shallow waters, where the seals have access to "more productive" sea floors with a higher availability of food.

See Nw. Ecosys. All., 475 F.3d at 1138, 1141-44 (discussing the distinct population segment policy and the level of deference afforded to it).

Using observational and predictive data from the Intergovernmental Panel on Climate Change's ("IPCC") Fourth Assessment Report, NMFS used six climate models to determine when the Beringia DPS's sea ice habitat would degrade to such an extent that it would render the Beringia DPS endangered, and it made available for public review its methodology and data. Proposed Rule, 75 Fed. Reg. at 77,497. All independent peer reviewers agreed that the Beringia DPS's continued viability depended on the availability of sea ice in the Bering and Barents Seas during crucial life stages.

After considering thousands of comments to the proposed rule, NMFS extended the review period and sought additional independent peer reviews of the sections of the status review report that generated the greatest disagreement among peer reviewers – the timing and magnitude of climate change effects on the availability of sea ice in the Bering Sea. Listing Rule, 77 Fed. Reg. at 76,741, 76,750-51. NMFS additionally updated its climate predictions to include studies published after the Proposed Listing Rule. *Id.* at 76,741 & 76,751. NMFS also held public hearings in Anchorage, Barrow, and Nome to solicit comments. *Id.* at 76,750.

NMFS determined that lack of access to non-continuous sea ice in shallow waters would require bearded seals to make significant adaptations to survive. *Id.* at 76,744. It reasoned that lack of access to sea ice over shallow waters likely would encourage seals in the Beringia DPS to whelp and nurse on shore, increasing their risk of exposure to their primary predators – polar bears and walruses. *Id.* at 76,742. Because

lack of sea ice in shallow water would require seals to forage in deeper waters that lacked the ocean floor "productivity" of shallow waters, NMFS concluded that as seals moved to deeper waters, they faced a greater risk of being unable to meet their subsistence needs. *Id.* And although bearded seals did not require year-round access to sea ice floes in shallow waters, most observational studies and peer reviewers opined that lack of access to sea ice during periods of significant life functions (birthing, nursing, hunting/foraging, molting) would likely have a negative effect on the Beringia DPS. *Id.*

Having concluded that the availability of sea ice in shallow water was crucial to the Beringia DPS's viability, NMFS evaluated several climate models to determine the magnitude and timing of climate change's impact on the availability of sea ice in areas inhabited by the Beringia DPS. *Id.* at 76,744. Those projections indicated that by 2095, sea ice in several regions where the Beringia DPS whelps will have disappeared entirely during the mating, nursing, and birthing season (April through June). *Id.* NMFS also concluded that any periodic "gains" in sea ice as a result of climate change were not really gains for the Beringia DPS. Instead, independent peer reviewers cautioned that "gains" in sea ice were illusory – seals would simply be able to access areas they already used in earlier months, but not during the times when critical life activities occurred. *Id.* The majority of peer reviewers commented that increased sea ice formation over deep waters would not offset sea ice losses in shallow waters

in the Bering, Chukchi, and Beaufort Seas. NMFS and its peer reviewers also noted that although climate change had caused sea ice patterns to shift during the year, there would be a net decrease in the total number of days in which sea ice would be available to the seals. *Id.* at 76,743-44.

NMFS published its final rule designating the bearded seal Beringia DPS as threatened in December 2012. *Id.* at 76,740. After providing 60 days' pre-filing notice under ESA Section 11, 16 U.S.C. § 1540(g)(2)(A)(i), AOGA filed suit challenging NMFS's listing decision.

IV.

The Endangered Species Act seeks to recover endangered and threatened species and to "reverse the trend towards species extinction, whatever the cost." *Jewell*, 815 F.3d at 550-51 (quoting *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978)); 16 U.S.C. § 1531(b). To achieve that purpose, the ESA requires the Secretary of Commerce, or her designee, to identify and list endangered[4] or threatened[5] species. *See* 16 U.S.C. § 1533(a)(1) & (2); *see also Nw. Ecosys. All.*, 475 F.3d at 1137. When determining whether to list a species, the

[4] The Act defines an "endangered species" as "any [non-insect] species which is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6).

[5] A "threatened species" is "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." 16 U.S.C. § 1532(20).

reviewing agency must make its decision "solely on the basis of the best scientific and commercial data available." 16 U.S.C. § 1533(b)(1)(A).

A.

1.

Because CBD's petition cited global warming as the primary threat to bearded seals, NMFS focused its status review on the impact of warmer temperatures on the Beringia DPS. Proposed Rule, 75 Fed. Reg. at 77,503. To determine the magnitude of climate change's effect on sea ice, NMFS utilized the IPCC's predictive models, and it attempted to apply those models to observational data that the Department of the Interior collected annually regarding sea ice in the Bering and Chukchi Seas. *Id.* at 77,503-05; Listing Rule 77 Fed. Reg. at 76,743. The IPCC's climate predictions through 2050 were based on already-collected data about present-day emissions.[6] Its climate projections for 2050 to 2100, however, used contemporary data to predict potential climate trends under multiple scenarios. Proposed Rule, 75 Fed. Reg. at 77,503. Those models showed greater volatility, and thus less reliable predictive value, in the Arctic. *Id.* Because modeling for the second half of the century involved unknown variables (technological improvement, changes in climate

[6] The Fish and Wildlife Service ("FWS") previously used the IPCC's 2050 climate projections to justify its decision to list the polar bear as a threatened species. *See Safari Club Int'l v. Salazar* (*In re Polar Bear ESA Listing & Section 4(d)Rule Litig.*), 709 F.3d 1, 15-16 (D.C. Cir.2013) ("*In re Polar Bear Litig.*")

policy), the IPCC used twenty-four models with slightly differing assumptions to obtain simulations of the upper- and lower-bounds for the increase in global temperatures from 2050 to 2100. *Id.*

To account for uncertainty in the IPCC's 2050 to 2100 predictions, NMFS used two models considered to be particularly reliable with respect to Arctic sea ice, and it used "medium" and "high" emissions scenarios to project monthly sea ice concentrations between March and July for each decade, beginning in 2025 and ending in 2095. *Id.* at 77,503-04. NMFS then compared the results of those projections to its observational data regarding sea ice to determine if the IPCC models performed reliably when applied to the Arctic. *Id.* at 77,504. Six models performed reliably in the Chukchi and east Siberian Seas, four performed reliably in the Beaufort and east Bering Seas, and one model performed reliably in the western Bering Sea. *Id.* NMFS disclosed its methodology, as well as the limits of the IPCC models, in the Proposed Listing Rule and in a Notice of Availability of Special Independent Peer Review Reports.

After confirming the models' accuracy, NMFS applied each to the areas occupied by the Beringia DPS to determine the range of temperatures per month from 2050 to 2100, and used those temperature projections to determine the impact of local warming on sea ice melt. *Id.* NMFS's projections demonstrated that by May and June 2050, there would be no sea ice in the Bering Strait, the East Siberian Shelf, or the Barents or Bering Seas. *Id.* By July 2050, sea ice would recede

to less than 20% of the mean or disappear entirely from the Beaufort, Chukchi, and East Siberian seas. *Id.* Most dramatically, by the time NMFS sought a second round of public comment on its climate projections, sea ice scientists published research indicating that the IPCC climate models understated the speed at which temperatures were rising at the poles. *Id.* at 77,503. Using observational data, those studies predicted that temperatures at the Arctic were 30 years ahead of schedule and that there would be "[a] nearly sea ice free summer Arctic by mid-century." *Id.* at 77,504.

Plaintiffs contend that NMFS used climate models that cannot reliably predict the degree of global warming beyond 2050 or the effect of that warming on a subregion, such as the Arctic. Although Plaintiffs frame their arguments as challenging long-term climate projections, they seek to undermine NMFS's use of climate change projections as the basis for ESA listings. Plaintiffs' contention is unavailing; in *Alaska Oil and Gas Association v. Jewell*, we adopted the D.C. Circuit's holding that the IPCC climate models constituted the "best available science" and reasonably supported the determination that a species reliant on sea ice likely would become endangered in the foreseeable future. 815 F.3d at 558-59; *In re Polar Bear Litig.*, 709 F.3d at 4-6, 9-11.

We have stressed that we "must defer to the agency's interpretation of complex scientific data" so long as the agency provides a reasonable explanation for adopting its approach and discloses the limitations of that approach. *Nw. Ecosys. All.*, 475 F.3d at 1150; *see*

also San Luis & Delta-Mendota Water Auth. v. Jewell, 747 F.3d 581, 602 (9th Cir. 2014) ("The determination of what constitutes the *best* scientific data available belongs to the agency's special expertise. . . . [and w]hen examining this kind of scientific determination . . . a reviewing court must generally be at its most deferential." (internal quotation marks omitted)). NMFS provided ample evidence of significant sea ice loss from 2007 to 2050, a period in which specific data supports the IPCC climate projections. Proposed Rule, 75 Fed. Reg. at 77,503-05. Those projections indicate that during months in which bearded seals used that ice for "critical life events" such as mating, birthing, and nursing, most Beringia DPS habitats will have lost most, if not all, of their sea ice. *Id.* at 77,504. By September 2010, observational data confirmed that the amount of summer sea ice in the areas populated by the Beringia DPS was 40% below the long-term average. *Id.* at 77,503. NMFS has provided a reasonable explanation, based on the best available scientific and commercial data, for relying on those projections in its listing decision.

NMFS's projections for the second-half of the century are also reasonable, scientifically sound, and supported by evidence. There is no debate that temperatures will continue to increase over the remainder of the century and that the effects will be particularly acute in the Arctic. The current scientific consensus is that Arctic sea ice will continue to recede through 2100, and NMFS considered the best available research to reach that conclusion. One independent peer

reviewer noted that nothing in "existing data would change the general picture that sea ice habitats important to bearded seals are disappearing and will continue to disappear, especially in the Bering and Chukchi seas." Excerpts of R. at 115, ECF No. 10. A second peer reviewer opined that it was "more likely than not that the *uncertainty* attaching to 80-year predictions of how changing climate will affect bearded seals and their habitat has been, is being, and will be greatly underestimated." Excerpts of R. at 118, ECF No. 10. All parties agree that there will be sea ice melt; the only uncertainty is the magnitude of warming, the speed with which warming will take place, and the severity of its effect.

The fact that climate projections for 2050 through 2100 may be volatile does not deprive those projections of value in the rulemaking process. The ESA does not require NMFS to make listing decisions only if underlying research is ironclad and absolute. *See San Luis & Delta-Mendota Water Auth.*, 747 F.3d at 602 ("[W]here the information is not readily available, we cannot insist on perfection: [T]he best scientific . . . data *available*, does not mean the best scientific data *possible*." (internal quotation marks omitted) (emphasis added)). The ESA directs NMFS to make its determinations "solely on the basis of the best scientific and commercial data available . . . after conducting a review of the status of the species." 16 U.S.C. § 1533(b)(1)(A). After conducting that assessment, if NMFS finds it likely that a species will "become an endangered species within the foreseeable future

throughout all or a significant portion of its range," it must list that species as threatened. 16 U.S.C. §§ 1532(20), 1533(b)(1)(B)(ii). NMFS provided a reasonable and scientifically supported methodology for addressing volatility in its long-term climate projections, and it represented fairly the shortcomings of those projections – that is all the ESA requires. *See Jewell*, 815 F.3d at 558 ("To the extent that Plaintiffs demand greater scientific specificity than available data could provide, [they] echo the district court's error in demanding too high a standard of scientific proof.").

The majority of independent peer reviewers agreed that NMFS's long-term climate projections were based on the "best scientific and commercial data available," that there was scientific consensus regarding the "direction and effect" of climate change, that there would be significant sea ice loss in the Beringia DPS's habitat, and that such a significant loss of habitat would almost certainly have a negative effect on the bearded seal's survival. Moreover, under NMFS's 2007 to 2050 climate projections, even if global warming plateaued in the second-half of the century, devastating sea ice losses would still result during months that are currently critical to the bearded seal's propagation.[7] Proposed Rule, 75 Fed. Reg. at 77,501-06.

[7] In the proposed and final rules, NMFS provided information regarding the negative impact of mid-century sea ice melt on the bearded seal's survival. Proposed Rule, 75 Fed. Reg. at 77,503-04 & 77,506; Listing Rule, 77 Fed. Reg. at 76,742-44. The

Further, climate studies released and noticed for public comment after the publication of the Proposed Listing Rule indicated that the Arctic was warming at a much faster rate than anticipated by the IPCC mid-century projections. Those studies, which are included in the administrative record, advised that observational data regarding current temperature increases indicated that Arctic sea ice may disappear as early as 2040 – approximately 50 years earlier than NMFS predicted when it suggested the Beringia DPS would lose its sea ice habitat by 2095. *See Jewell*, 815 F.3d at 558-60 ("FWS also noted [in *In re Polar Bear Litigation*] that the observational record of current sea ice losses indicates that losses seem to be about 30 years ahead of the modeled values, which suggests a seasonally ice-free Arctic may come a lot sooner than expected."). The administrative record demonstrates that NMFS provided a reasonable and evidence-based justification for its mid-century and end-of-century sea ice projections.

The ESA does not require NMFS to base its decision on ironclad evidence when it determines that a species is likely to become endangered in the foreseeable future; it simply requires the agency to consider the best and most reliable scientific and commercial data and to identify the limits of that data when making a listing determination. In light of the data available to it during the rulemaking process, NMFS reasonably concluded that there would be continued sea ice loss

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district court did not address those projections, but instead focused on the longer-term projections, which predict a total loss of sea ice.

over shallow waters, resulting in habitat loss that would almost certainly threaten the Beringia DPS's survival. NMFS has provided a rational and reasonable basis for evaluating the bearded seal's viability over 50 and 100 years, and it has candidly disclosed the limitations of the available data and its analysis. The ESA does not require more, and NMFS did not act arbitrarily or capriciously in concluding that the effects of global climate change on sea ice would endanger the Beringia DPS in the foreseeable future.

2.

Plaintiffs advance three principal arguments to challenge NMFS's listing decision. First, Plaintiffs contend that NMFS's use of longer-term climate projections diverges from its previous practice of setting the year 2050 as the outer boundary of its "foreseeable future" analysis. NMFS has argued, and several federal courts have agreed, that the agency may determine the timeframe for its "foreseeable future" analysis based upon the best data available for a particular species and its habitat. *In re Polar Bear Litig.*, 709 F.3d at 10-11, 15-16 (allowing NMFS to determine the timeline for "foreseeable future" threats of extinction based on the specific species, habitat, and best available science at the time of listing); *see also W. Watersheds Project v. Ashe*, 948 F. Supp. 2d 1166, 1180 (D. Idaho 2013) ("The [agency's] assessment of the 'foreseeable future' is typically based on the timeframes over which the best available scientific data allow [the agency] to reliably assess threats and the species' response to those

threats. . . ." (internal quotation marks omitted)); *Ctr. for Biological Diversity v. Lubchenco*, 758 F. Supp. 2d 945, 967 (N.D. Cal. 2010) (observing that "the length of time that constitutes the 'foreseeable future' for listing purposes may vary depending on the species and the threats it faces").

We apply the same standard of review whether an agency issues a new policy or changes a previous policy position. *Cf. FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 513-14 (2009). An internal guidance document that reflects an agency's "body of experience and informed judgment," but that is not promulgated through rulemaking, is typically afforded *Skidmore*[8] deference. *Fed. Express Corp. v. Holowecki*, 552 U.S. 389, 399 (2008); *Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, 488 (2004); *United States v. Mead Corp.*, 533 U.S. 218, 230-32 (2001). An agency must provide a reasoned explanation for adoption of its new policy – including an acknowledgment that it is changing its position and if appropriate, any new factual findings that may inform that change – but it need not demonstrate that the new policy is better than its prior policy. *Fox Television Stations*, 556 U.S. at 515; *see also Price v. Stevedoring Servs. of Am., Inc.*, 697 F.3d 820, 829-30 (9th Cir. 2012); *Nat'l Ass'n of Home Builders v. EPA*, 682 F.3d 1032, 1037-38 (D.C. Cir. 2012).

In 2009, the Department of the Interior issued an internal memorandum notifying the FWS that its

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[8] *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944).

interpretation of the "foreseeable future" must be supported by reliable data regarding "threats to the species, how the species is affected by those threats, and how the relevant threats operate over time." Office of the Solicitor of the U.S. Dep't of the Interior, *Memorandum on the Meaning of "Foreseeable Future" in Section 3(20) of the Endangered Species Act*, No. M-37021 (Jan. 16, 2009); *see also* Listing Rule, 77 Fed. Reg. at 76,753 (citing Notice of Reinitiation of Status Review for Ribbon Seal, 76 Fed. Reg. 77,467, 77,468 (Dec. 13, 2011) (reevaluating the ribbon seal petition in light of new information regarding sea ice decline)). The Solicitor noted that a threat-specific evaluation of the best data available would result in different "foreseeable future" time frames for different species and for different threats. Mem. No. M-37021 at 8.

NMFS acknowledged in its final Listing Rule that, consistent with the Solicitor's opinion and beginning with the bearded seal petition, it changed its interpretation of "foreseeable future" to a more dynamic, species-specific and evidence-based definition. Proposed Rule, 75 Fed. Reg. at 77,497; Listing Rule, 77 Fed. Reg. at 76,753. In prior petitions, NMFS had evaluated whether climate change would endanger a species by the year 2050, regardless of any research advancements regarding climate or a specific species. Listing Rule, 77 Fed. Reg. at 76,753 (explaining the use of climate projections through 2050 for the ribbon seal and polar bear). The Solicitor's advisory letter acknowledges that its interpretation represents a change in agency policy, and it provides a thorough and reasoned

explanation for its recommendation that the Service adopt a data-driven threat analysis for future harm. Mem. No. M-37021 at 4, 8-9. The letter also states explicitly that the policy change seeks to conform to federal appellate decisions requiring ESA analyses to adhere to the statute's "best data available" standard. *Id.* at 8-9 (citing *Bennett v. Spear*, 520 U.S. 154, 176 (1997); *Bldg. Indus. Ass'n of Superior Cal. v. Norton*, 247 F.3d 1241, 1246-47 (D.C. Cir. 2001)).

NMFS's decision to adopt a foreseeability analysis that is responsive to new, reliable research while accounting for species-, threat-, and habitat-specific factors is well-reasoned and consistent with the ESA's mandate. On the record before us, NMFS's changed approach was neither arbitrary nor capricious.

3.

Next, Plaintiffs contend that NMFS failed to provide an evidence-based explanation for the relationship between habitat loss and the bearded seal's survival. They argue that NMFS has not provided sufficient evidence to demonstrate a nexus between the loss of sea ice and the bearded seal's risk of future extinction. They note that at the time NMFS issued its final listing rule, the bearded seal had not suffered population losses, and they argue NMFS should have adopted a "wait and see" approach before determining whether to list the bearded seal.

Similarly, the district court took issue with NMFS's disclosure that it could only provide a range

for the Beringia DPS baseline population, which would make it difficult to measure the relationship between population declines and loss of access to sea ice. *Pritzker*, 2014 WL 3726121, at *15. The district court concluded that NMFS was unable to provide a predicted "population reduction," "extinction threshold," or "probability of reaching that threshold," and that without that information, there was no reasonable basis for listing the Beringia DPS as threatened. *Id.* & n.69. The district court expressed doubt that NMFS was able to conduct a reasonable risk assessment supported by evidence when the agency could not provide population information on the current state of the species. *Id.*

The district court's effort to impose requirements for which data is unavailable or does not exist is at odds with the ESA. NMFS demonstrated that, based on the best data available at the time of listing, a decrease in sea ice availability would likely have a significant adverse effect on the bearded seal population. In rejecting the Beringia DPS final listing rule, the district court imposed ad hoc requirements that exceed the ESA's provisions. The district court's request for unobtainable, highly specified data would require NMFS to wait until it had quantitative data reflecting a species' decline, its population tipping point, and the exact year in which that tipping point would occur before it could adopt conservation policies to prevent that species' decline. Uncertainty regarding the speed and magnitude of that adverse impact, however, does not invalidate data presented in the administrative record that reasonably supports the conclusion that loss of

habitat at key life stages will likely jeopardize the Beringia DPS's survival over the next 85 years.

We recently reversed a district court's decision to vacate an ESA critical habitat rule because the court required highly specific information for which data simply did not exist. In *Alaska Oil and Gas Association v. Jewell*, the district court suggested that an agency could only designate areas containing polar bear dens as critical habitats, as opposed to conserving a greater amount of land to allow the bears to roam. 815 F.3d at 555. We rejected the district court's imposition of additional requirements because the district court's "narrow construction of critical habitat runs directly counter to the Act's conservation purposes." *Id.* We noted that the ESA was "concerned with protecting the future of the species, not merely the preservation of existing bears." *Id.*

The Service need not wait until a species' habitat is destroyed to determine that habitat loss may facilitate extinction. In *Defenders of Wildlife v. Norton*, we held that evidence of habitat loss, without a reasoned explanation providing a causal link between loss of habitat and a species' survival, was inadequate to support listing a species as threatened. 258 F.3d 1136, 1143 (9th Cir. 2001). But NMFS did not rely on habitat loss, alone, to justify its listing decision. Instead, the agency drew upon existing research to explain how habitat loss would likely endanger the bearded seal. *See In re Polar Bear Litig.*, 709 F.3d at 9-10 (distinguishing *Defenders of Wildlife* by noting that the agency's reasoned explanation regarding the impact of

habitat loss on a specific species provided an adequate basis for its listing decision). NMFS has demonstrated that it "considered the relevant factors and articulated a rational connection between the facts found and the choices made." *Nw. Ecosys. All.*, 475 F.3d at 1140 (quoting *Nat'l Ass'n of Home Builders v. Norton*, 340 F.3d 835, 841 (9th Cir. 2003)). That is all the ESA requires.

4.

In addition to contesting the causal relationship between loss of sea ice and the Beringia DPS's long-term survival, Plaintiffs contend that NMFS was required to demonstrate that the impact of climate change on the Beringia DPS "will be of a magnitude that places the species 'in danger of extinction' by the year 2100." Plaintiffs' argument misinterprets the ESA's requirement that an agency demonstrate that a species will "likely become an endangered species within the foreseeable future" before listing that species as threatened under the Act. 16 U.S.C. § 1532(20).

NMFS correctly contends that the ESA directs the agency to determine the likelihood of a species' endangerment based on one or more statutory factors: (1) the present or threatened destruction of a species' habitat or range; (2) overutilization of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting its continued existence. 16

U.S.C. § 1533(a)(1). Significantly, the ESA does not require an agency to quantify population losses, the magnitude of risk, or a projected "extinction date" or "extinction threshold" to determine whether a species is "more likely than not" to become endangered in the foreseeable future. NMFS also contends that the district court erred when it held that NMFS must demonstrate a "predicted population reduction," define an "extinction threshold," and provide information on the "probability of reaching that threshold within a specified time."

NMFS is correct; neither the ESA nor our case law requires the agency to calculate or otherwise demonstrate the "magnitude" of a threat to a species' future survival before it may list a species as threatened. Although the phrase "likely to become endangered" is not defined by the ESA or a regulation, NMFS has interpreted the term "likely" to have its common meaning (i.e., more likely than not). Indeed, most dictionaries define "likely" to mean that an event, fact, or outcome is probable. *Likely*, THE MERRIAM-WEBSTER DICTIONARY (new ed. 2016); *Likely*, OXFORD ENGLISH DICTIONARY ONLINE (3d ed. 2016); *Likely*, BLACK'S LAW DICTIONARY (10th ed. 2014); *see also Taniguchi v. Kan Pac. Saipan, Ltd.*, 132 S. Ct. 1997, 2002-04 (2012) (discussing the use of dictionaries to determine the ordinary or common meaning of a word). We agree with the D.C. Circuit that NMFS is not required to define "likely" in terms that require specific quantitative targets. *In re Polar Bear Litig.*, 709 F.3d at 14-15; *cf. Defs. of Wildlife*, 258 F.3d at 1141-43 (declining to adopt a

quantitative definition when interpreting the phrase "substantial portion of its range").

We conclude that NMFS did not misinterpret or misapply the word "likely" when it concluded that the bearded seal was "likely to become an endangered species within the foreseeable future."

* * *

Although data regarding the bearded seal is limited, NMFS conducted a thorough assessment based on the best available scientific and commercial data, and it seriously considered the comments it received prior to listing the Beringia DPS as a threatened species. In arriving at that conclusion, NMFS complied with the letter and spirit of the ESA, and it afforded the public ample notice and opportunity to participate in its rulemaking process. In light of the robustness of NMFS's rulemaking process, as well as our highly deferential standard of review, we hold that NMFS's final rule listing the Beringia DPS as threatened was not arbitrary or capricious, and its listing decision was supported by substantial evidence.

B.

We turn to Alaska's argument that NMFS failed to comply with its obligations under the ESA to provide the State with a written justification explaining why it "fail[ed] to adopt regulations consistent with the [state] agency's comments." 16 U.S.C. § 1533(i) ("ESA Section 4(i)" or "Section 4(i)"); *see also* 50 C.F.R.

§ 424.18. Alaska state agencies, including the Department of Fish and Game, Department of Environmental Conservation, Department of Natural Resources, and Department of Law, jointly submitted comments recommending that NMFS decline to list any sea ice seals as threatened and to revisit the issue in 20 to 50 years.

NMFS sent a letter to the Commissioner of the Alaska Department of Fish and Game, the lead agency for the State, notifying Alaska of its listing decision and identifying sections of the final listing rule where NMFS addressed the State's substantive comments. Alaska argued, and the district court agreed, that NMFS's letter to Alaska was insufficient to discharge its notification duties under ESA Section 4(i). *Pritzker*, 2014 WL 3726121, at *10.

The district court, however, did not have the benefit of our opinion in *Alaska Oil and Gas Association v. Jewell*, which held that Section 4(i) did not impose a separate notification duty upon federal agencies. 815 F.3d at 562-64. Relying on *T-Mobile South, LLC v. City of Roswell*, 135 S. Ct. 808, 811 (2015), we held that nothing in Section 4(i) required separate state notification – the provision only required that the justification for rejecting a state agency's comments be addressed in writing. *Jewell*, 815 F.3d at 563. We further held that Section 4(i) "does not foreclose cross-referencing other publicly available documents," and we noted that when several state agencies submit a consolidated comment letter, a federal agency may respond with a single letter to the State. *Id.*

The State's arguments are foreclosed in light of our holding in *Alaska Oil and Gas Association v. Jewell*. NMFS's final listing rule provides thorough responses to Alaska's substantive comments, and any issues unaddressed in the rule are discussed in the agency's letter to Commissioner Campbell. Although Alaska argues that NMFS failed to address several of its substantive comments, the record indicates otherwise. For example, NMFS addressed Alaska's argument that some bearded seals did not rely on multi-year ice in Comments 10, 24, and 32. NMFS addressed Alaska's argument that temperature oscillations could result in habitat gains in Comment 8. NMFS did not discuss in detail Alaska's hypothesis that bearded seals could survive in deep water because the majority of the record evidence found that seals preferred to feed in shallower waters, and there was no reliable data indicating that bearded seals lived year-round in deep waters or could adapt to such circumstances.[9] Finally, NMFS adopted the position of the overwhelming majority of the world's climate scientists and rejected Alaska's argument that climate projections are "hypotheses" that are not linked to observable data and that cannot provide reasonable estimates of future climate-change-related phenomena.

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[9] Alaska argues that NMFS's letter failed to address its resiliency argument, which appears in Comment 9 of the Listing Rule. Although NMFS failed to highlight Comment 9 in its letter, the state agencies' substantive concerns were adequately addressed in the final Listing Rule.

Thus, consistent with *Alaska Oil and Gas Association v. Jewell*, NMFS satisfied its Section 4(i) obligation to provide written responses that cite to record evidence. Although Alaska may disagree with NMFS's resolution of conflicting opinions and its final listing determination, the State received the notice, opportunity, and process required by 16 U.S.C. §§ 1533(b)(5)(A)(ii) and 1533(i). *See Jewell*, 815 F.3d at 563-64 (noting that a federal agency's rejection of a state comment does not constitute a failure to provide a substantive response). On this record, NMFS clearly fulfilled its procedural and substantive obligations under Section 4(i).

V.

The judgment of the district court is **REVERSED**.

APPENDIX B

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ALASKA

ALASKA OIL AND GAS ASSOCIATION, *et al.*, Plaintiffs, vs. PENNY PRITZKER, U.S. SECRETARY OF COMMERCE, *et al.*, Defendants.	Case No. 4:13-cv-00018-RRB **MEMORANDUM DECISION** (Filed Jul. 25, 2014)
STATE OF ALASKA, Plaintiff, vs. NATIONAL MARINE FISHERIES SERVICE, *et al.*, Defendants.	Case No. 4:13-cv-00021-RRB
NORTH SLOPE BOROUGH, *et al.*, Plaintiffs, vs. PENNY PRITZKER, *et al.*, Defendants.	Case No. 4:13-cv-00022-RRB

I. DECISION APPEALED

On December 28, 2012, the National Marine Fisheries Service ("NMFS") and National Oceanic and Atmospheric Administration ("NOAA") of the Department of Commerce issued a final decision listing the Beringia and Okhotsk distinct population segments ("DPS") of bearded seals (the *Erignathus barbatus nauticus* subspecies) as threatened under the Endangered Species Act ("ESA") (hereinafter referred to as the "Listing Rule").[1] These consolidated actions challenge that decision.[2] The facts underlying the consolidated actions are well known to parties and a matter

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[1] *Endangered and Threatened Species; Threatened Status for the Beringia and Okhotsk Distinct Population Segments of the Erignathus barbatus nauticus Subspecies of the Bearded Seal*, 77 Fed. Reg. 76739-68 (December 28, 2012); *see* 50 C.F.R. § 223.102 *Enumeration of threatened marine and anadromous species.* (10-1-13 Edition).

[2] *Plaintiffs:* In addition to the Alaska Oil and Gas Association ("AOGA"), the American Petroleum Institute ("API") is a plaintiff in 4:13-cv-00018. In addition to the North Slope Borough ("NSB"), plaintiffs in 4:13-cv-00022 include the Arctic Slope Regional Corporation ("ASRC"), Northwest Arctic Borough ("NAB"), NANA Regional Corporation ("NANA"), and Inupiat Community of the Arctic Slope ("Inupiat Community") (collectively "Northern Alaska Plaintiffs").

Defendants: In addition to the Secretary of Commerce, NMFS, and NOAA, defendants in 4:13-cv-00021 include Kathryn D. Sullivan, Acting NOAA Administrator and Samuel D. Rauch, Assistant NOAA Administrator (for convenience, unless the context clearly indicates otherwise, as used herein, "NMFS" refers to the federal defendants collectively). The Center for Biological Diversity, Inc. ("CBD") has appeared as an intervener defendant in the consolidated action.

of public record. Accordingly, the facts will not be repeated herein except to the extent necessary to understand the decision of this Court.

II. PENDING MOTIONS

At **Docket 50** Plaintiffs AOGA/API have moved for summary judgment, which NMFS has opposed and cross-moved for summary judgment.[3] The Center for Biological Diversity ("CBD") has also opposed and cross-moved for summary judgment.[4] AOGA/API have replied and opposed the cross-motions.[5]

At **Docket 54** the Northern Alaska Plaintiffs have moved for summary judgment, which NMFS and CBD have opposed and cross-moved for summary judgment.[6] The Northern Alaska Plaintiffs have replied and opposed the cross-motions.[7]

At **Docket 55** the State of Alaska (hereinafter "State") has moved for summary judgment, which NMFS and CBD have opposed and cross-moved for summary judgment.[8] The State has replied and opposed the cross-motions.[9]

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[3] Docket 63.

[4] Docket 64.

[5] Docket 65.

[6] Dockets 63 (NMFS); 64(CBD).

[7] Docket 66.

[8] Dockets 63 (NMFS); 64(CBD).

[9] Docket 73.

The Court being fully advised in the matter has determined that oral argument would not materially assist in resolving the issues presented. Accordingly, the requests for oral argument are **DENIED**.[10]

III. JURISDICTION and VENUE

Jurisdiction is vested in this Court under 28 U.S.C. §§ 1331, 2201-02, 16 U.S.C. § 1540(g), and 5 U.S.C. §§ 553, 702-06. Venue is proper under 29 U.S.C. § 1391(e).

IV. STANDARD OF REVIEW/ISSUES PRESENTED

Because the ESA does not supply a separate standard for review, this Court reviews claims under the standards of the Administrative Procedures Act ("APA").[11] The APA provides that an agency action must be upheld on judicial review unless it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."[12] As applied to the ESA, the Ninth Circuit recently held:

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[10] D.Ak. LR 7.2(a)(3)[B].

[11] *San Luis & Delta-Mendota Water Auth. v. Jewel*, 747 F.3d 581, 601 (9th Cir. 2014) (citing *Bennett v. Spear*, 520 U.S. 154, 174 (1997)); *Oregon Natural Desert Ass'n v. Bureau of Land Mgmnt.*, 625 F.3d 1092, 1109 (9th Cir. 2010); *Pyramid Lake Paiute Tribe of Indians v. United States Dept. of Navy*, 898 F.2d 1410, 1414 (9th Cir. 1990)).

[12] 5 U.S.C. § 706(2)(A).

As a reviewing court, we must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. Although our inquiry must be thorough, the standard of review is highly deferential; the agency's decision is entitled to a presumption of regularity," and we may not substitute our judgment for that of the agency. Where the agency has relied on relevant evidence [such that] a reasonable mind might accept as adequate to support a conclusion, its decision is supported by substantial evidence. Even [i]f the evidence is susceptible of more than one rational interpretation, [the court] must uphold [the agency's] findings.

Under the ESA, the agency must base its actions on evidence supported by the best scientific and commercial data available. The determination of what constitutes the *best* scientific data available belongs to the agency's special expertise . . . When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential. Absent superior data[,] occasional imperfections do not violate the ESA best available standard.

The 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. Essentially, FWS cannot ignore available biological information. Thus, insufficient . . .

> [or] incomplete information . . . does not excuse [an agency's] failure to comply with the statutory requirement of a comprehensive biological opinion using the best information available where there was some additional superior information available. On the other hand, where the information is not readily available, we cannot insist on perfection: [T]he best scientific . . . data available, does not mean the best scientific data possible.[13]

The Ninth Circuit has made clear that a court's review of agency decisions under the APA is extremely narrow. Under § 706(2)(A), a court may set aside an agency action only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." When reviewing "under the arbitrary and capricious standard[,]" a court is deferential to the agency involved.[14] A court may not substitute its judgment for that of the agency:[15] as long as the agency states a rational connection between the facts found and the decision made it must be upheld.[16] This deference is particularly appropriate where the decision of

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[13] *San Luis & Delta-Mendota Water Auth.*, 747 F.3d at 601-02 (internal citations and quotation marks omitted) (omissions and substitutions in the original).

[14] *Nat'l Ass'n of Homebuilders v. Defenders of Wildlife*, 551 U.S. 644, 658 (2007).

[15] *Citizens to Pres. Overton Park v. Volpe*, 401 U.S. 402, 416 (1971).

[16] *Home Builder's Ass'n of Northern Calif. v. United States Fish and Wildlife Svc.*, 616 F.3d 983, 988 (9th Cir. 2010) (quoting *Tucson Herpetological Soc'y v. Salazar*, 566 F.3d 870, 875 (9th Cir. 2009).

the agency at issue "requires a high level of technical expertise."[17]

This Court's review is limited to "the administrative record already in existence, not some new record made in the reviewing court."[18]

> If the record before the agency does not support the agency action, if the agency has not considered all relevant factors, or if the reviewing court simply cannot evaluate the challenged agency action on the basis of the record before it, the proper course, except in rare circumstances, is to remand to the agency for additional investigation or explanation. The reviewing court is not generally empowered to conduct a *de novo* inquiry into the matter being reviewed and to reach its own conclusions based on such an inquiry . . .
>
> The factfinding capacity of the district court is thus typically unnecessary to judicial review of agency decision making.[19]

Where, as here, the Court is reviewing an agency's interpretation of a statute, such as the ESA, the appropriate framework of review under *Chevron* is a two-step process: (1) first the court must look to the plain

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[17] *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 375-77 (1989); *see Alaska Wilderness Recreation and Tourism Ass'n v. Morrison*, 67 F.3d 723, 727 (9th Cir. 1995).

[18] *Camp v. Pitts*, 411 U.S. 138, 142 (1973).

[19] *San Luis & Delta-Mendota Water Authority*, 747 F.3d at 602 (internal citations and quotation marks omitted).

meaning of the statutory language, i.e., is it unambiguous; and (2) if ambiguous, whether the agency's interpretation of the statutory language is permissible.[20] In this case it is indisputable that the statute in question fails the "plain meaning" rule, it is ambiguous. "When it enacted the ESA, Congress delegated broad administrative and interpretive power to the Secretary [of Commerce]."[21] As the Ninth Circuit has found "[by] leaving an 'explicit gap' for agency promulgated regulations, the ESA expressly delegates authority to the [agency] to decide how such listing determinations are to be made."[22] Thus, this Court examines the Listing Rule before it under *Chevron's* second step, i.e., whether the agency's interpretation is permissible.[23]

Applying the foregoing standards, the ultimate issue presented in this appeal is whether or not the decision to list the Beringia and Okhotsk DPSs of the *Erignathus barbatus nauticus* subspecies of bearded seals as threatened under the ESA was "arbitrary, capricious, an

[20] *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984).

[21] *Babbitt v. Sweet Home Chapter of Cmtys for Greater Oregon*, 515 U.S. 687, 708 (1995); *see* 16 U.S.C. § 1533(c)(1), *see also* 50 C.F.R. § 402.01(b) (re-delegating that authority to NMFS).

[22] *Trout Unlimited v. Lohn*, 559 F.3d 946, 961 (9th Cir. 2009).

[23] An agency determination qualifies under the second-step of the *Chevron* rule when it meets two requirements: (1) "when it appears that Congress delegated authority to the agency generally to make rules carrying the force of law," and (2) "the agency interpretation claiming deference was promulgated in the exercise of that authority." *United States v. Mead Corp.*, 533 U.S. 218, 226-27 (2001).

abuse of discretion, or otherwise not in accordance with law." For the reasons set forth below, the Court concludes that under the circumstances and given the lack of evidence upon which the listing was based, the decision to include the Beringia bearded seals as threatened was arbitrary, capricious and an abuse of discretion.

V. STANDING

NMFS contends that the Plaintiffs lack standing to challenge the listing of the Okhotsk DPS of the bearded seals, which is located in the Sea of Okhotsk off the coast of Japan and the Russian Federation. NMFS also challenges the standing of the Northern Alaska Plaintiffs in its entirety. Standing is a threshold question affecting the jurisdiction of this Court. Accordingly, it must be determined first.

To bring an action under the APA, a party must have both constitutional and prudential standing.[24] To have standing under Article III, a plaintiff must show that it has: (1) "suffered an injury in fact," i.e. "an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical"; (2) with a causal connection between the act complained of and the injury;

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[24] *Association of Data Processing Service Organizations v. Camp*, 307 U.S. 150, 151-52 (1970).

and (3) a reasonable likelihood that a favorable decision will redress the injury.[25] "For a plaintiff to have prudential standing under the APA, the interest to be sought to be protected by the complainant must be arguably within the zone of interests to be protected or regulated by the statute in question."[26]

In opposition AOGA/API do not contend that they have suffered any injury in fact as a result of the Listing Rule's inclusion of the Okhotsk DPS. Instead, AOGA/API argue that they are attacking the Listing Rule in its entirety and, because it is indivisible, it stands or falls in its entirety. In addition to advancing a similar argument, the State further contends that it has standing because it is "injured by NMFS's lack of disclosure . . . and lack of consideration or evaluation of relevant factors in the listing decision." The State also contends that "[a]s one of the wildlife management authorities in the circumpolar region, Alaska has a direct interest in seeing that NMFS complies with ESA § 4 as concerns species throughout the region, especially where other individuals of the same species (from Alaska's perspective) occur within Alaska." Finally, the State argues that "[t]he Okhotsk listing is counter to Alaska's policy concern's and plans, and it

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[25] *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992) (internal quotation marks and citations omitted).

[26] *National Credit Union Admin. v. First Nat'l Bank & Trust Co.*, 522 U.S. 479, 488 (1998) (internal quotation marks and alteration omitted).

presents adverse precedent for other listing decisions based on factors of concern to Alaska."[27]

A. *Listing of the Okhotsk Segment*

First, this Court rejects the indivisibility argument. The Court agrees that the factors that Plaintiffs contend render the decision to list the Beringia DPS invalid *could* likewise render the decision to list the Okhotsk DPS invalid. But that is not the test: the test is whether or not the decision to list both segments could have been made separately as opposed to being inextricably intertwined. While the NMFS chose to list both in the same listing, Plaintiffs have not cited any rule, regulation, or decision that NMFS was required to do so. In short, the Court may sever the decision to list the Beringia segment from the decision to list the Okhotsk segment.[28]

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[27] Plaintiff State of Alaska's Reply Memorandum in Support of its Motion for Summary Judgment. Docket 73 at 13-14.

[28] The Court also disagrees with the supposition that, if the decision to list the Beringia DPS is unsupported by the evidence, then the listing of the Okhotsk DPS more likely than not suffers from the same infirmity. The evidence differed as to both segments, which requires separate analyses. In addition, the record reflects that NMFS initially proposed listing the Okhotsk DPS, but not the Beringia DPS. Moreover, in the absence of some party having a concrete and particularized interest, which is not apparent in this case, this Court need not reach that issue. If it were to do so, the Court would be in effect entering an advisory opinion, which is specifically forbidden. *See Flast v. Cohen*, 392 U.S. 83, 95-97 (1968).

The Court also rejects the State's additional argument regarding its interest. Reduced to its essence, the State's argument is that it has an interest in ensuring that NMFS complies with the law. The fatal flaw in the State's position is that it would confer standing to challenge almost every decision made by a Federal agency. The generalized interest advanced by the State is insufficient to confer standing under the standard laid down in *Lujan*. The Court therefore concludes that Plaintiffs have not set forth suffcient evidence of standing as to the Okhotsk DPS of bearded seals.

Accordingly, the Court will address solely the listing of the Beringia DPS.

B. *Standing of Northern Alaska Plaintiffs*

NMFS contends that the Northern Alaska Plaintiffs have not asserted a sufficient "injury in fact" that is "concrete and particularized." Even if, as NMFS argues, the interest of the Northern Alaska Plaintiffs may be speculative and remote, other factors override the objection to their standing. It is indisputable that a listing as a threaten species has a chilling effect on the extent of the scope and nature of human interaction with that species. In this case, it is also indisputable that the Northern Alaska Plaintiffs have a historic cultural relationship with the Beringia DPS of seals, including subsistence. The Northern Alaska Plaintiffs certainly have at least as much of a direct interest in the Listing Rule as does CBD; the Court would err if it

did not permit CBD to intervene on the side of NMFS.[29] Accordingly, the Court declines to dismiss the Northern Alaska Plaintiffs for lack of standing.

VI. DISCUSSION

A. *Listing Rule*

NMFS provided the following summary:

> **SUMMARY:** We, NMFS, issue a final determination to list the Beringia and Okhotsk distinct populations segments (DPSs) of the *Erignathus barbatus nauticus* subspecies of the bearded seal (*Erignathus barbatus*) as threatened under the Endangered Species Act (ESA). We will propose to designate critical habitat for the Beringia DPS in a future rulemaking. To assist us with this effort, we solicit information that may be relevant to the designation of critical habitat for the Beringia DPS. In light of public comments and upon further review, we are withdrawing the proposed ESA section 4(d) protective regulations for the Beringia and Okhotsk DPSs because we have determined that such regulations are not necessary or advisable for the conservation of the Beringia and Okhotsk DPSs at this time. Given their current population sizes, the long-term nature of the primary threat to these DPSs (habitat alteration stemming from climate change), and the existing protections under the Marine Mammal Protection

[29] *See Center for Biological Diversity v. Kempthorne*, 588 F.3d 701, 707-08 (9th Cir. 2009).

> Act, it is unlikely that the proposed protective regulations would provide appreciable conservation benefits.[30]

Plaintiffs challenge the following finding in the Listing Rule:

> We have reviewed the status of the bearded seal, fully considering the best scientific and commercial data available, including the status review report. We have reviewed threats to the Beringia DPS and the Okhotsk DPS, as well as other relevant factors, and considered conservation efforts and special designations for bearded seals by states and foreign nations. In consideration of all of the threats and potential threats to bearded seals identified above, the assessment of the risks posed by those threats, the possible cumulative impacts, and the uncertainty associated with all of these, we draw the following conclusions:
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> *Beringia DPS:* (1) The present population size of the Beringia DPS is uncertain, but is estimated to be about 155,000 individuals. (2) It is highly likely that reductions will occur in both the extent and timing of sea ice in the range of the Beringia DPS within the foreseeable future, particularly in the Bering Sea. To adapt to this modified ice regime, bearded seals would likely have to shift their nursing, rearing, and molting areas to ice-covered seas north of the Bering Strait, where projections

[30] 77 Fed. Reg. 76740.

> suggest there is potential for the ice edge to retreat to deep waters of the Arctic basin, forcing the seals to adapt to suboptimal conditions and exploit potentially unsuitable habitats, and likely compromising their reproduction and survival rates. (3) Available information indicates a moderate to high threat that reductions in spring and summer sea ice will result in spatial separation of sea ice resting areas from benthic feeding habitat. (4) Available information indicates a moderate to high threat of reductions in sea ice suitable for molting (i.e., areas with at least 15 percent ice concentration in May-June) and a moderate threat of reductions in sea ice suitable for pup maturation (i.e., areas with at least 25 percent ice concentration in April-May). (5) Within the foreseeable future, the risks to the persistence of the Beringia DPS appear to be moderate (abundance and diversity) to high (productivity and spatial structure). We have determined that the Beringia DPS is not in danger of extinction throughout all of its range, but it is likely to become so within the foreseeable future. Therefore, we are listing it as threatened.[31]

The ESA defines a threatened species as one that "is likely to become an endangered species within the foreseeable future through all or a significant portion

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[31] 77 Fed. Reg. 76748.

of its range."[32] With respect to this provision the Listing Rule stated in response to a comment suggesting that the listing was premature:

> Whether a species is healthy at the time of listing or beginning to decline is not the deciding factor. The inquiry requires NMFS to consider the status of the species both in the present and through the foreseeable future. Having received a petition and subsequently having found that the petition presented substantial information indicating that listing bearded seals may be warranted (73 FR 51615; September 4, 2008), we are required to use the best scientific and commercial data available to determine whether bearded seals satisfy the definition of an endangered or threatened species because of any of the five factors identified under section 4(a)(1) of the ESA. These data were compiled in the status review report of the bearded seal (Cameron *et al.*, 2010) and summarized in the preamble to the proposed rule.
>
> We agree that the Beringia and Okhotsk DPSs are moderately large population units, are widely distributed and genetically diverse, and are not presently in danger of extinction. However, these characteristics do not protect them from becoming at risk of extinction in the foreseeable future as a consequence of widespread habitat loss. Based on the best available scientific data, we have concluded that it is highly likely that sea ice will

[32] 16 U.S.C. § 1532(20); 50 C.F.R. § 424.01(m) (10-1-12).

decrease substantially within the range of the Beringia DPS in the foreseeable future, particularly in the Bering Sea. To adapt to this modified sea ice regime, bearded seals would likely have to shift their nursing, rearing, and molting areas to ice-covered seas north of the Bering Strait, where projections suggest there is potential for the spring and summer ice edge to retreat to deep waters of the Arctic basin. The most significant threats to the Beringia DPS were identified by the BRT as decoupling of sea ice resting areas from benthic foraging areas, decreases in sea ice habitat suitable for molting and pup maturation, and decreases in prey density and/or availability due to changes in ocean temperature and ice cover, which were scored as of 'moderate' or 'moderate to high' significance (Table 7; Cameron *et al.*, 2010). The greatest threats to the persistence of bearded seals in the Okhotsk DPS were determined by the BRT to be decreases in sea ice habitat suitable for whelping, nursing, pup maturation, and molting. These threats, which were assessed by the BRT as of 'high significance,' are more severe in the range of the Okhotsk DPS than in the range of the Beringia DPS because of the likelihood that the Sea of Okhotsk will by the end of this century frequently be ice-free or nearly so during April-June, the crucial months for these life history events.

Data were not available to make statistically rigorous inferences about how these DPSs will respond to habitat loss over time. We note that we currently have no mechanism

to detect even major changes in bearded seal population size (Taylor *et al.*, 2007). However, the BRT's assessment of the severity of the demographic risks posed to the persistence of each of bearded seals DPSs was formalized using a numerical scoring system. The risks to the persistence of the Beringia and Okhotsk DPSs within the foreseeable future were judged to be moderate to high, with consistently higher risk scores assigned to the Okhotsk DPS (Table 9; Cameron *et al.*, 2010). After considering these risks as well as the remaining factors from section 4(a)(1) of the ESA, we concluded that the Beringia and Okhotsk DPSs are likely to become endangered within the foreseeable future (threatened), primarily due to the projected loss of sea ice habitat.[33]

B. *Applicable Statutes*

Section 4(a)(1) of the ESA (16 U.S.C. § 1533(a)(1)) provides:

(a) **Generally**

(1) The Secretary shall by regulation promulgated in accordance with subsection (b) of this section determine whether any species is an endangered species or a threatened species because of any of the following factors:

[33] 77 Fed. Reg. 76758 (response to Comment 18).

> (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
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> (B) overutilization for commercial, recreational, scientific, or educational purposes;
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> (C) disease or predation;
>
> (D) the inadequacy of existing regulatory mechanisms; or
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> (E) other natural or manmade factors affecting its continued existence.

It is evident that in this case that § 4(a)(1)(B), (C), and (D) are clearly inapplicable, leaving § 4(a)(1)(A) and (E).

Section 4(b)(1) of the ESA (16 U.S.C. § 1533(b)(1)) provides in relevant part:

> (b) **Basis for determinations**
>
> (1)
>
> (A) The Secretary shall make determinations required by subsection (a)(1) of this section solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat

> and food supply, or other conservation practices, within any area under its jurisdiction; or on the high seas.
>
> (B) In carrying out this section, the Secretary shall give consideration to species which have been –
>
> (I) designated as requiring protection from unrestricted commerce by any foreign nation, or pursuant to any international agreement; or
>
> (ii) identified as in danger of extinction, or likely to become so within the foreseeable future, by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish or wildlife or plants.

The regulations promulgated by the Secretary reiterate the provisions of ESA § 4(a)(1) and (b)(1).[34] It has been stated that "[t]he ultimate goal of the ESA is to recover listed species to the point where they no longer need ESA protection."[35] It is within this general framework that this Court must resolve the issue before it.

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[34] *See* 50 CFR § 424.11(b), (c) *Factors for listing, delisting, or reclassifying species* (10-1-12).

[35] *Western Watersheds Project v. Ashe*, 948 F. Supp. 2d 1166, 1171 (D. Idaho 2013) (citing 16 U.S.C. §§ 1531(b)-(c), 1532(3)).

C. *Effect of Listing*

NMFS is authorized to issue such regulations as it may consider necessary and advisable for the preservation of a listed species.[36] The ESA further provides that concurrently with the listing as threatened or endangered, the Secretary "shall . . . designate any habitat of such species which is then considered to be critical habitat."[37] The listing of a species as threatened triggers several protective provisions.[38] The most recent edition of C.F.R. Part 223 (October 1, 2013) does not itself contain any provision generally or specifically regulating activities affecting the Beringia DPS. It does, however, note that the provisions therein "are in addition to, and not in lieu of, other regulations of parts 222 through 226 of this chapter which prescribe additional restrictions or conditions governing threatened species."[39] Of these, only Part 222, which applies to both threatened and endangered species,[40] applies to this case.[41] In this case, the only apparent provision

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[36] ESA § 4(d) [16 U.S.C. § 1533(d)].

[37] ESA § 4(a)(3)(A) [16 U.S.C. § 1533(a)(3)(A)].

[38] *See* 50 C.F.R. § 223.101(a) (10-1-12) (stating that the purpose and scope of the regulations is to provide for conservation of threatened species by establishing rules and procedures to govern activities involving them).

[39] 50 C.F.R. § 223.101(c) (10-1-2013).

[40] Governing "the taking, possession, transportation, sale, purchase, barter, exploration, importation of, and other requirements to wildlife . . . determined to be threatened or endangered pursuant to section 4(a) of the Act." 50 C.F.R. § 222.101(a) (10-1-2013).

[41] Part 224 applies to endangered specifies with no apparent application in this case. Part 225 is reserved. Part 226 designates

that may be applicable is the general permitting procedures.[42] However, the regulations also specifically provide that a permit is required solely for threatened species to which the Secretary has applied the limitations of ESA § 9(a) [16 U.S.C. § 1538(a)] by regulation.[43]

Although it was initially proposed to apply ESA § 9(a) to the listing, in promulgating the Listing Rule NMFS determined that it was "not aware of any [information], indicating that the addition of the ESA § 9 prohibitions would apply to any activities that are currently unregulated and are having, or have the potential to have, significant effects on the Beringia or Okhotsk DPS."[44] NMFS then concluded that, because § 9(a) prohibitions would not provide appreciable conservation benefits and they could be adopted in the future if necessary, it was unnecessary to adopt them at this time.[45] NMFS noted:

> Section 7(a)(2) of the ESA requires Federal agencies to consult with us to ensure that activities they authorize, fund, or conduct are not likely to jeopardize the continued existence of a listed species or a species proposed for listing, or to adversely modify critical habitat or proposed critical habitat. If a Federal action may affect a listed species or its critical

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critical habitat for various species, but does not designate any critical habitat for the Beringia DPS.

[42] 50 C.F.R. §§ 222.301, *et seq.*

[43] 50 C.F.R. § 222.301(b).

[44] 77 Fed. Reg. 76749.

[45] *Id.*

> habitat, the responsible Federal agency must enter into consultation with us. Examples of Federal actions that may affect the Beringia DPS of bearded seals include permits and authorizations relating to coastal development and habitat alteration, oil and gas development (including seismic exploration), toxic waste and other pollutant discharges, and cooperative agreements for subsistence harvest.[46]

D. *Analysis of Arguments*

Plaintiffs raise several alleged errors: (1) a failure to link its sea-ice projections to habitat changes, biological functions, and population changes; (2) improper use and application of the "foreseeable future" (specifically, a significant and allegedly unsupported change in the reliability of projecting 100 years into the future instead of 50); (3) failure to adequately respond to the State's comments; (4) uncertainty and lack of adequate information to support the listing, specifically the lack of available information/data to reasonably determine either an extinction threshold or whether such a threshold would be reached; and (5) an unexplained change from the initial draft that did not list the Beringia DPS as threatened.

The Listing Rule also addressed changes in ocean conditions.

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[46] *Id.*; *see* 77 Fed. Reg. 76765 (response to Comment 50).

Ocean acidification is an ongoing process whereby chemical reactions occur that reduce both seawater pH and the concentration of carbonate ions when CO2 is absorbed by seawater. Results from global ocean CO2 surveys over the past two decades have shown that ocean acidification is a predictable consequence of rising atmospheric CO2 levels. The process of ocean acidification has long been recognized, but the ecological implications of such chemical changes have only recently begun to be appreciated. The waters of the Arctic and adjacent seas are among the most vulnerable to ocean acidification. The most likely impact of ocean acidification on bearded seals will be through the loss of benthic calcifiers and lower trophic levels on which the species' prey depends. Cascading effects are likely both in the marine and freshwater environments. Our limited understanding of planktonic and benthic calcifiers in the Arctic (e.g., even their baseline geographical distributions) means that future changes will be difficult to detect and evaluate.

Warming of the oceans is predicted to drive species ranges toward higher latitudes. Additionally, climate change can strongly influence fish distribution and abundance. Further shifts in spatial distribution and northward range extensions appear to be inevitable, and the species composition of the plankton and fish communities will continue to change under a warming climate.

> Bearded seals of different age classes are thought to feed at different trophic levels, so any ecosystem change could be expected to affect bearded seals in a variety of ways. Changes in bearded seal prey, anticipated in response to ocean warming and loss of sea ice and, potentially, ocean acidification, have the potential for negative impacts, but the possibilities are complex. These ecosystem responses may have very long lags as they propagate through trophic webs. Because of bearded seals' apparent dietary flexibility, these threats are of less concern than the direct effects of potential sea ice degradation.[47]

After analyzing the effect of changes in ocean conditions the Listing Rule concluded:

> Bearded seals of different age classes are thought to feed at different trophic levels, so any ecosystem change could be expected to affect bearded seals in a variety of ways. Changes in bearded seal prey, anticipated in response to ocean warming and loss of sea ice and, potentially, ocean acidification, have the potential for negative impacts, but the possibilities are complex. These ecosystem responses may have very long lags as they propagate through trophic webs. Because of bearded seals' apparent dietary flexibility, these threats are of less concern than the direct effects of potential sea ice degradation. Bearded seals of different age classes are thought to feed at different trophic levels, so

[47] 77 Fed. Reg. 76744-45.

> any ecosystem change could be expected to affect bearded seals in a variety of ways. Changes in bearded seal prey, anticipated in response to ocean warming and loss of sea ice and, potentially, ocean acidification, have the potential for negative impacts, but the possibilities are complex. These ecosystem responses may have very long lags as they propagate through trophic webs. Because of bearded seals' apparent dietary flexibility, these threats are of less concern than the direct effects of potential sea ice degradation.[48]

The Listing Rule also concluded that the potential threat to bearded seals from disease was low, and the adequacy of existing regulatory mechanisms was also included in the risk assessment.[49] With respect to pollution and contaminants, oil and gas industry, fisheries, and shipping the Listing Rule concluded: "We find that the threats posed by pollutants, oil and gas industry activities, fisheries, and shipping do not individually or collectively place the Beringia DPS or the Okhotsk DPS at risk of becoming endangered in the foreseeable future."[50] The analysis of demographic risks concluded:

> The degree of risk posed by the threats associated with the impacts of global climate change on bearded seal habitat is uncertain

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[48] 77 Fed. Reg. 76745.

[49] *Ibid.* It is noted that the only discussion of green-house gases was in connection with the Okhotsk segment.

[50] 77 Fed. Reg. 76747.

> due to a lack of quantitative information linking environmental conditions to bearded seal vital rates, and a lack of information about how resilient bearded seals will be to these changes. The BRT considered the current risks (in terms of abundance, productivity, spatial structure, and diversity) to the persistence of the Beringia DPS and the Okhotsk DPS as low or very low. The BRT judged the risks to the persistence of the Beringia DPS within the foreseeable future to be moderate (abundance and diversity) to high (productivity and spatial structure), and to the Okhotsk DPS to be high for abundance, productivity, and spatial structure, and moderate for diversity.[51]

Although the Listing Rule discussed conservation efforts in general, it made neither findings nor drew conclusions from conservation efforts, internationally or domestically. The Court does note, however, that the tenor of the analysis in the Listing Rule was generally positive in noting ongoing monitoring of the bearded seal population by others.

The Listing Rule concluded:

> *Beringia DPS* (1) The present population size of the Beringia DPS is uncertain, but is estimated to be about 155,000 individuals. (2) It is highly likely that reductions will occur in both the extent and timing of sea ice in the range of the Beringia DPS within the foreseeable future, particularly in the Bering Sea. To

[51] 77 Fed. Reg. 76747-48.

> adapt to this modified ice regime, bearded seals would likely have to shift their nursing, rearing, and molting areas to ice-covered seas north of the Bering Strait, where projections suggest there is potential for the ice edge to retreat to deep waters of the Arctic basin, forcing the seals to adapt to suboptimal conditions and exploit potentially unsuitable habitats, and likely compromising their reproduction and survival rates. (3) Available information indicates a moderate to high threat that reductions in spring and summer sea ice will result in spatial separation of sea ice resting areas from benthic feeding habitat. (4) Available information indicates a moderate to high threat of reductions in sea ice suitable for molting (i.e., areas with at least 15 percent ice concentration in May-June) and a moderate threat of reductions in sea ice suitable for pup maturation (i.e., areas with at least 25 percent ice concentration in April-May). (5) Within the foreseeable future, the risks to the persistence of the Beringia DPS appear to be moderate (abundance and diversity) to high (productivity and spatial structure). We have determined that the Beringia DPS is not in danger of extinction throughout all of its range, but it is likely to become so within the foreseeable future. Therefore, we are listing it as threatened.[52]

The parties agree that the Listing Rule relied principally, if not solely, upon climate change as the

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[52] 77 Fed. Reg. 76748.

governing factor for listing the Beringia DPS as threatened.[53] It is also undisputed that, under the regulations, climate change is not only a factor properly considered, but that a listing may be made on any one of the factors alone.[54] It is further undisputed that the term "foreseeable future" is not defined by either statute or regulation; accordingly, the agency defines it on a case-by-case basis in each listing decision.[55] With that general background, the Court will address the issues raised: first the procedural issues, then the substantive issues.

1. Procedural Issues

Initially, the Court rejects Plaintiffs' argument that NMFS impermissibly added the Beringia DPS after the initial publication of a proposed rule. It is undisputed that the Plaintiffs had adequate and timely notice of the intent to include the Beringia DPS. Indeed, the record is clear that Plaintiffs vigorously opposed that listing. Consequently, Plaintiffs not only cannot claim any prejudice by that action, but they cite no authority that a species cannot be added to, or removed from, a proposed listing during the rule making

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[53] *See* 77 Fed. Reg. 76741.

[54] 50 C.F.R. § 424.11(c) (10-1-12).

[55] *See In re Polar Bear Endangered Species Act Listing and Section 4(d) Rule Litigation – MDL No. 1993*, 709 F.3d 1, 15 (D.C. Cir.), *cert. denied sub nom. Safari Club Int'l. v. Jewell*, 134 S. Ct. 310 (2013).

process. Nor, for that matter, has independent research by the Court discovered any such authority.

The State contends that NMFS failed to adequately respond to the State's comments. Section 4(I) of the EPA [16 U.S.C. § 1533(I)] provides in relevant part that where, as here, a State has filed comments disagreeing with the proposed regulation, "the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comment or petition."[56]

NMFS argues that it responded to each of the State's comments in either its direct response to the State's comments or in the Listing Rule itself. As the State notes, in rejecting the argument that responding in the listing rule was sufficient, this Court itself recently held:

> First, it is clear from the fact that Congress established a *separate procedure* to respond to state agency comments, as opposed to comments from other affected parties, that Congress envisioned a *separate duty* on the part of the Service to specifically respond to those state comments not adopted in a final rule. Indeed, the statute clearly requires that *after* a final rule is issued, the Service must provide a *separate* written justification to the state agency responsible for the comments not used in the final rule. Thus, the Service's statement that adequate responses to the

[56] *See* 50 C.F.R. § 424.18(c) (10-1-12) (containing identical language).

> State's unused comments could be found *in part in the Final Rule itself* is directly contrary to ESA procedure. By not including in the response letter *all* its responses to the State's comments not ultimately included in the Final Rule, the Service did not fulfill its response obligations under the ESA.[57]

NMFS has not cited any controlling authority that this Court's earlier decision is erroneous, nor has it advanced any compelling argument that the Court should reverse itself. Accordingly, this Court holds that it does not appear that NMFS adequately responded to the State's comments.

2. Substantive Issues

Plaintiffs' substantive issues can be conflated into two: (1) uncertainty and lack of information to support the listing, including failure to link its sea-ice projections to habitat changes, biological functions, and population changes; and (2) improper use of a 100-year projection into the future.

Plaintiffs contend that there is a lack of data to link projected habitat declines to bearded seal biological response and the ultimate projected population trends. The Listing Rule identified five main functions of sea-ice with respect to bearded seals.

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[57] *Alaska Oil and Gas Ass'n v. Salazar*, 916 F. Supp. 2d 974, 1003 (D. Alaska 2013) (emphasis in the original) (footnotes omitted).

> An assessment of the risks to bearded seals posed by climate change must consider the species' life-history functions, how they are linked with sea ice, and how altering that link will affect the vital rates of reproduction and survival. The main functions of sea ice relating to the species' life-history are: (1) A dry and stable platform for whelping and nursing of pups in April and May (Kovacs *et al.*, 1996; Atkinson, 1997); (2) a rearing habitat that allows mothers to feed and replenish energy reserves lost while nursing; (3) a habitat that allows a pup to gain experience diving, swimming, and hunting with its mother, and that provides a platform for resting, relatively isolated from most terrestrial and marine predators; (4) a habitat for rutting males to hold territories and attract post-lactating females; and (5) a platform suitable for extended periods of hauling out during molting.[58]

NMFS then discussed in general terms the effect of these five factors on the bearded seal population.[59]

With respect to the predictions of the effect of changes in sea-ice on the Beringia DPS, the Listing Rule found:

> *Beringia DPS:* In the Bering Sea, early springtime sea ice habitat for bearded seal whelping should be sufficient in most years through 2050 and out to the second half of the 21st century, when the average ice extent in

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[58] 77 Fed. Reg. 76742.

[59] 77 Fed. Reg. 76742-43.

April is forecasted to be approximately 50 percent of the present-day extent. The general trend in projections of sea ice for May (nursing, rearing, and some molting) through June (molting) in the Bering Sea is toward a longer ice-free period resulting from more rapid spring melt. Until at least the middle of the 21st century, projections show some years with near-maximum ice extent; however, less ice is forecasted on average, manifested as more frequent years in which the spring retreat occurs earlier and the peak ice extent is lower. By the end of the 21st century, projections for the Bering Sea indicate that there will commonly be years with little or no ice in May, and that sea ice in June is expected to be non-existent in most years.

Projections of sea ice concentration indicate that there will typically be 25 percent or greater ice concentration in April-May over a substantial portion of the shelf zone in the Bering Sea through 2055. By 2095 ice concentrations of 25 percent or greater are projected for May only in small zones of the Gulf of Anadyr and in the area between St. Lawrence Island and Bering Strait. In the minimal ice years the projections indicate there will be little or no ice of 25 percent or greater concentration over the shelf zone in the Bering Sea during April and May, perhaps commencing as early as the next decade. Conditions will be particularly poor for the molt in June when typical ice predictions suggest less than 15 percent ice by mid-century. Projections suggest that the spring and summer ice edge

could retreat to deep waters of the Arctic Ocean basin, potentially separating sea ice suitable for pup maturation and molting from benthic feeding areas.

In the East Siberian, Chukchi, and Beaufort seas, the average ice extents during April and May (i.e., the period of whelping, nursing, mating, and some molting) are all predicted to be very close to historical averages out to the end of the 21st century. However, the annual variability of this extent is forecasted to continue to increase, and single model runs indicate the possibility of a few years in which April and May sea ice would cover only half (or in the case of the Chukchi Sea, none) of the Arctic shelf in these regions by the end of the century. The projections indicate that there will typically be 25 percent or greater ice concentration in April-June over the entire shelf zones in the Beaufort, Chukchi, and East Siberian Seas through the end of the century. In the minimal ice years 25 percent or greater ice concentration is projected over the shelf zones in April and May in these regions through the end of the century, except in the eastern Chukchi and central Beaufort Seas. In the 2090s, ice suitable for molting in June (i.e., 15 percent or more concentration) is projected to be mostly absent in these regions in minimal years, except in the western Chukchi Sea and northern East Siberian Sea.

A reduction in spring and summer sea ice concentrations could conceivably result in the development of new areas containing suitable

habitat or enhancement of existing suboptimal habitat. For example, the East Siberian Sea has been said to be relatively low in bearded seal numbers and has historically had very high ice concentrations and long seasonal ice coverage. Ice concentrations projected for May-June near the end of the century in this region include substantial areas with 20-80 percent ice, potentially suitable for bearded seal reproduction, molting, and foraging. However, the net difference between sea ice related habitat creation and loss is likely to be negative, especially because other factors like ocean warming and acidification (discussed below) are likely to affect habitat.

A substantial portion (about 70 percent) of the Beringia DPS currently whelps in the Bering Sea, where a longer ice-free period is forecasted in May and June. To adapt to this modified sea ice regime, bearded seals would likely have to shift their nursing, rearing, and molting areas to the ice covered seas north of the Bering Strait, potentially with poor access to food, or to coastal haul-out sites on shore, potentially with increased risks of disturbance, predation, and competition. Both of these scenarios would require bearded seals to adapt to novel (i.e., suboptimal) conditions, and to exploit habitats to which they may not be well suited, likely compromising their reproduction and survival rates. Further, the spring and summer ice edge may retreat to deep waters of the Arctic Ocean basin, which could separate sea ice suitable for pup maturation and molting from benthic feeding areas.

> Accordingly, we conclude that the projected changes in sea ice habitat pose significant threats to the persistence of the Beringia DPS throughout all of its range.[60]

NMFS addressed the use of the 100-year projection.

> *Comment 5:* A peer reviewer and several public comments pointed out that assessing impacts to bearded seals from climate change through the end of this century is inconsistent with: (1) Other recent ESA determinations for Arctic species, such as ribbon seal and polar bear, that considered species responses through mid-century; and (2) IUCN red list process, which uses a timeframe of three generation lengths. Related public comments, including from the State of Alaska, noted that NMFS's recent ESA listing determination for the ribbon seal and a subsequent court decision concluded that projections of climate scenarios beyond 2050 are too heavily dependent on socioeconomic assumptions and are therefore too divergent for reliable use in assessing threats to the species. A reviewer and some commenters expressed the opinion that trying to predict the responses of bearded seals to environmental changes beyond mid-century increases the uncertainty unreasonably. A few commenters suggested that the altered approach is significant because the listing determination is wholly dependent upon NMFS's use of a 100-year foreseeable

[60] 77 Fed. Reg. 76743-44.

future. Several commenters expressed the opinion that inadequate justification was provided for NMFS's use of a 100-year foreseeable future. Many of these commenters suggested that the best scientific data support a "foreseeable future" time frame of no more than 50 years, and some commenters such as the State of Alaska suggested a shorter time horizon of no more than 20 years. In contrast, another peer reviewer and some commenters expressed support for use of climate model projections through the end of the 21st century.

Response: The ESA requires us to make a decision as to whether the species under consideration is in danger of extinction throughout all or a significant portion of its range (endangered), or is likely to become endangered within the foreseeable future throughout all or a significant portion of its range (threatened) based on the best scientific and commercial data available. While we may consider the assessment processes of other scientists (i.e., IUCN), we must make a determination as to whether a species meets the definition of threatened or endangered based upon an assessment of the threats according to section 4 of the ESA. We have done so in this rule, using a threat-specific approach to the "foreseeable future" as discussed below and in the proposed listing rule.

In the December 30, 2008, ribbon seal listing decision (73 FR 79822) the horizon of the foreseeable future was determined to be

the year 2050. The reasons for limiting the review to 2050 included the difficulty in incorporating the increased divergence and uncertainty in future emissions scenarios beyond this time, as well as the lack of data for threats other than those related to climate change beyond 2050, and that the uncertainty inherent in assessing ribbon seal responses to threats increased as the analysis extended farther into the future. By contrast, in our more recent analyses for spotted, ringed, and bearded seals, we did not identify a single specific time as the foreseeable future. Rather, we addressed the foreseeable future based on the available data for each respective threat. This approach better reflects real conditions in that some threats (e.g., disease outbreaks) appear more randomly through time and are therefore difficult to predict, whereas other threats (climate change) evince documented trends supported by paleoclimatic data from which reasonably accurate predictions can be made farther into the future. Thus, the time period covered for what is reasonably foreseeable for one threat may not be the same for another. The approach is also consistent with the memorandum issued by the Department of the Interior, Office of the Solicitor, regarding the meaning of foreseeable future (Opinion M-37021; January 16, 2009). In consideration of this modified threat-specific approach, NMFS initiated a new status review of the ribbon seal on December 13, 2011 (76 FR 77467).

As discussed in the proposed listing rule, the analysis and synthesis of information presented in the IPCC's AR4 represents the scientific consensus view on the causes and future of climate change. The IPCC's AR4 used state-of-the-art atmosphere-ocean general circulation models (AOGCMs) under six "marker" scenarios from the SRES (IPCC, 2000) to develop climate projections under clearly stated assumptions about socioeconomic factors that could influence the emissions. Conditional on each scenario, the best estimate and likely range of emissions were projected through the end of the 21st century. In our review of the status of the bearded seal, we considered model projections of sea ice developed using the A1 B scenario, a medium "business-as-usual" emissions scenario, as well the A2 scenario, a high emissions scenario, to represent a significant range of variability in future emissions.

We also note that the SRES scenarios do not assume implementation of additional climate initiatives beyond current mitigation policies. This is consistent with consideration of "existing" regulatory mechanisms in our analysis under ESA listing Factor D. It is also consistent with our Policy on Evaluating Conservation Efforts (68 FR 15100; March 28, 2003), which requires that in making listing decisions we consider only formalized conservation efforts that are sufficiently certain to be implemented and effective.

The model projections of global warming (defined as the expected global change in surface air temperature) out to about 2040-2050 are primarily due to emissions that have already occurred and those that will occur over the next decade. Thus conditions projected to mid-century are less sensitive to assumed future emissions scenarios. For the second half of the 21st century, however, the choice of an emissions scenario becomes the major source of variation among climate projections. As noted above, in our 2008 listing decision for ribbon seal, the foreseeable future was determined to be the year 2050. The identification of mid-century as the foreseeable future took into consideration the approach taken by the FWS in conducting its status review of the polar bear under the ESA, and the IPCC assertion that GHG levels are expected to increase in a manner that is largely independent of assumed emissions scenarios until about the middle of the 21st century, after which the emissions scenarios become increasingly influential.

Subsequently, in the listing analyses for spotted, ringed, and bearded seals, we noted that although projections of GHGs become increasingly uncertain and subject to assumed emissions scenarios in the latter half of the 21st century, projections of air temperatures consistently indicate that warming will continue throughout the century. Although the magnitude of the warming depends somewhat on the assumed emissions scenario, the trend is clear and unidirectional. To the extent that

the IPCC model suite represents a consensus view, there is relatively little uncertainty that warming will continue. Because sea ice production and persistence is related to air temperature through well-known physical processes, the expectation is also that loss of sea ice and reduced snow cover will continue throughout the 21st century. Thus, the more recent inclusion of projections out to the year 2100 reflects NMFS's intention to use the best and most current data and analytical approaches available. AOGCM projections consistently show continued reductions in ice extent and multi-year ice (ice that has survived at least one summer melt season) throughout the 21st century (e.g., Holland *et al.*, 2006; Zhang and Walsh, 2006; Overland and Wang, 2007), albeit with a spread among the models in the projected reductions. In addition, as discussed by Douglas (2010), the observed rate of Arctic sea ice loss has been reported as greater than the collective projections of most IPCC-recognized AOGCMs (e.g., Stroeve *et al.*, 2007; Wang and Overland, 2009), suggesting that the projections of sea ice declines within this century may in fact be conservative.

We concluded that in this review of the status of the bearded seal, the climate projections in the IPCC's AR4, as well as the scientific papers used in this report or resulting from this report, represent the best scientific and commercial data available to inform our assessment of the potential impacts from climate change. In our risk assessment for

> bearded seals, we therefore considered the full 21st century projections to analyze the threats stemming from climate change. We continue to recognize that the farther into the future the analysis extends, the greater the inherent uncertainty, and we incorporated that consideration into our assessments of the threats and the species' responses to the threats.[61]

NMFS acknowledged that it lacks sufficient data on the resilience of bearded seals to cope with climatic changes;[62] or to define an extinction threshold for bearded seals and assessing the probability of reaching that threshold within a specified time;[63] and that, because the existing body of information regarding bearded seal population and trends was limited, additional studies were needed to understand the population dynamics and habitat of the bearded seal.[64]

As noted above, what constitutes the "foreseeable future" is determined by the agency on a case-by-case basis. Reduced to its essence, the argument advanced by Plaintiffs is that NMFS should not have considered the effect on the Beringia DPS beyond 50 years. The

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[61] 77 Fed. Reg. 76752-54.

[62] 77 Fed. Reg. 76755 (responses to Comments 8 and 9).

[63] 77 Fed. Reg. 76757 (response to Comment 16).

[64] 77 Fed. Reg. 76759 (response to Comment 19); *see also* 77 Fed. Reg. 76760 (response to Comment 27) (conceding that a more thorough assessment of seal habitat and population response to the climatic changes was needed before the threat of extinction could be assessed with any level of certainty)).

Court has reviewed the authorities cited by the Plaintiffs and finds them either inapposite or not controlling on the issue.[65] Likewise, this Court finds that the recent polar bear case decided by the D.C. Circuit relied upon by NMFS is also inapposite. In that case, although the Fish and Wildlife Service reviewed models projecting climate and ice changes over periods of 45, 75 and 100 years,[66] the challenged listing was based upon a 45-year period, which the District Court specifically found was not too long.[67] Independent research by the Court has not revealed any case in which a listing of threatened was based upon a time period that exceeded 50 years. Thus, in that respect this Court is writing on a clean slate.

Troubling to this Court is that it does not appear from the Listing Rule that any serious threat of a reduction in the population of the Beringia DPS, let alone extinction, exists prior to the end of the 21st century. Indeed, the Listing Rule itself concedes that, at least through mid-21st century, there will be sufficient sea-ice to sustain the Beringia DPS at or near its current

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[65] In each of the cases cited the relevant time-period considered by the agency in making the listing was less than 50 years. Although it is plausible to interpret those cases as not precluding a longer period, they cannot be plausibly construed as necessarily permitting it. The precise issue was simply not before any court.

[66] *In re Polar Bear Endangered Species Act Listing and Section 4(d) Rule Litigation*, 794 F. Supp. 2d 65, 75-76, 94-95 (D. D.C. 2011), *aff'd* 709 F.3d 1 (D.C. Cir.), *cert. denied sub nom. Safari Club Int'l. v. Jewell*, 134 S. Ct. 310 (2013).

[67] *Id.* at 75.

population levels.[68] Indeed, with respect to the second half of the century it appears that no significant threat to the Beringia DPS is contemplated before 2090. Even as to that date, NMFS acknowledges that it lacks any reliable data as to the actual impact on the bearded seal population as a result of the loss of sea-ice. Under the facts in this case, forecasting more than 50 years into the future is simply too speculative and remote to support a determination that the bearded seal is in danger of becoming extinct.[69]

VII. CONCLUSION AND ORDER

After reviewing the voluminous record and applicable case law/, the Court has determined that the action of NMFS in listing the Beringia DPS of bearded seals was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."[70] In particular, with respect to two factors: (1) the lack of any articulated discernable, quantified threat of extinction within the *reasonably* foreseeable future; and (2) the express finding that, because existing protections were

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[68] 77 Fed. Reg. 76743-44.

[69] This Court is *not* holding that the use of projections that extend out more than 50 years is impermissible in all cases. The Court's holding today is limited to the facts presented in the record before it, i.e., that an unknown, unquantifiable population reduction, which is not expected to occur until nearly 100 years in the future, is too remote and speculative to support a listing as threatened. If it were to hold otherwise, such a holding could logically render every species in the arctic and sub-arctic areas potentially "threatened."

[70] 5 U.S.C. § 706(2)(A).

adequate, no further protective action need be taken at this time. Listing the Beringia DPS as "endangered" had no effect except to require all federal agencies to consult with NMFS before carrying out any action that might jeopardize the continued existence of the Beringia DPS throughout its range. A listing under the ESA based upon speculation, that provides no additional action intended to preserve the continued existence of the listed species, is inherently arbitrary and capricious.

Where, as here, the agency's action is found to be arbitrary and capricious, the appropriate action is to remand to the agency.[71] "[V]acatur of an unlawful agency rule normally accompanies a remand."[72]

Therefore, Plaintiffs' Motions for Summary Judgment at **Dockets 50, 54, and 55** are hereby **GRANTED**. The final rule shall be **VACATED** to the extent it affects the Beringia bearded seal DPS and **REMANDED** to NMFS to correct the aforementioned substantive and procedural deficiencies.

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[71] *Nat'l Ass'n of Homebuilders*, 551 U.S. at 657-58.

[72] *Alsea Valley Alliance v. Dep't of Commerce*, 358 F.3d 1181, 1185-86 (9th Cir. 2004).

The Clerk of the Court is directed to enter final judgment accordingly.

IT IS SO ORDERED this 25th day of July, 2014.

S/ RALPH R. BESITLINE
UNITED STATES
DISTRICT JUDGE

APPENDIX C

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

ALASKA OIL AND GAS ASSOCIATION; et al., Plaintiffs-Appellees, v. PENNY PRITZKER, U.S. Secretary of Commerce; et al., Defendants-Appellants.	Nos. 14-35806 and 14-35811 D.C. No. 4:13-cv-00018-RRB District of Alaska, Fairbanks ORDER (Filed Feb. 22, 2017)

Before: FISHER, PAEZ, and HURWITZ, Circuit Judges.

Judges Paez and Hurwitz have voted to deny the petition for rehearing en banc and Judge Fisher so recommends.

The full court has been advised of the petition for rehearing en banc and no judge has requested a vote on whether to rehear the matter en banc. Fed. R. App. P. 35.

The petition for rehearing en banc is DENIED.