

Nos. 16-35380 & 16-35382

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

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

v.

PENNY PRITZKER, in her official capacity as Secretary of Commerce;
KATHRYN D. SULLIVAN, in her official capacity as Under Secretary of
Commerce for Oceans and Atmosphere and National Oceanic and Atmospheric
Administration Administrator; NATIONAL MARINE FISHERIES SERVICE;
EILEEN SOBECK, Assistant Administrator for Fisheries, National Oceanic and
Atmospheric Administration; NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION, *Defendants-Appellants*,
and
CENTER FOR BIOLOGICAL DIVERSITY, *Intervenor-Defendant-Appellant*.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA
Nos. 4:14-cv-00029-RRB, 4:15-cv-00002-RRB, 4:15-cv-00005-RRB

OPENING BRIEF FOR INTERVENOR-DEFENDANT

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CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure, Intervenor-Defendant Center for Biological Diversity hereby states that it is a non-profit conservation organization and has no parent companies, subsidiaries, or affiliates that have issued shares to the public in the United States or abroad.

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INTRODUCTION

Arctic ringed seals cannot survive without adequate sea ice and snow cover. But climate change is causing sea ice and snow to disappear, jeopardizing the survival of the species. Indeed, the international scientific consensus on climate change warns that the earth will continue to warm throughout this century and that the warming will cause a dramatic loss of sea ice and snow cover in the Arctic. In light of this overwhelming evidence, the National Marine Fisheries Service (“NMFS”) complied with the Endangered Species Act (“ESA”) by protecting the Arctic ringed seal as a “threatened” species. 16 U.S.C. §§ 1532(20); 1533.

After Federal Defendants filed their Opening Brief, the Ninth Circuit decided a case on the very same issues presented in this litigation. Specifically, the Ninth Circuit upheld NMFS’s listing of another Arctic seal species, the bearded seal, as threatened because climate change is melting the sea ice habitat it needs to survive. *Alaska Oil & Gas Ass’n v. Pritzker*, Nos.14-35806 & 14-35811, 2016 U.S. App. LEXIS 19084 (9th Cir. Oct. 24, 2016). The apposite bearded seal case demonstrates why NMFS’s decision to list Arctic ringed seals as threatened under the ESA is also correct.

As with the listing of the bearded seal, NMFS here relied on the best available science and reasonably determined that the sea ice and snow cover ringed seals need to survive would decline to such an extent that ringed seals will likely

vanish from most of the places they live and be threatened with extinction within the foreseeable future. That is all the ESA requires. *See id.* at *22-23.

Moreover, the Ninth Circuit's decision in *Alaska Oil & Gas Ass'n v. Pritzker* squarely rejects the bases on which the district court vacated the Arctic ringed seal listing. *See id.* at *27-28. The district court found NMFS's decision to list Arctic ringed seals improper because NMFS did not establish a numeric tipping point for the species, determine the precise year in which the species would decline to that point, or otherwise use quantitative data. These are the *exact* standards on which the district court vacated NMFS's listing of the bearded seal, and the *exact* standards the Ninth Circuit expressly overruled as antithetical to the ESA's mandate that listing decisions be made on the basis of the best available science. *See id.* at *27-28. The district court's imposition of identical, non-existent statutory standards for listing the Arctic ringed seal fails for the same reason.

As the Ninth Circuit made clear in upholding NMFS's decision to list the bearded seal, the ESA is concerned with protecting the future of a species, not just the preservation of existing animals. *Id.* at *28. Accordingly, NMFS need not wait until an ice-dependent species' sea ice habitat is destroyed to conclude the loss of that habitat will likely threaten the species with extinction. *Id.* at *29. NMFS's well-reasoned, well-supported decision to list Arctic ringed seals is consistent with the ESA's basic premise that NMFS protect imperiled species with enough time to

save them. This Court should therefore reverse the district court and reinstate NMFS's listing of the Arctic ringed seal as a threatened species.

STATEMENT OF JURISDICTION

Intervenor-Defendant adopts the Statement of Jurisdiction in Federal Defendants' Opening Brief, ECF No. 9 at 1.

STATEMENT OF THE ISSUES

Intervenor-Defendant adopts the Statement of the Issues in Federal Defendants' Opening Brief, ECF No. 9 at 1-2.

STATUTES AND REGULATIONS

All pertinent statutes and regulations are contained in the Addendum to the Opening Brief of Federal Defendants, ECF No. 9.

STATEMENT OF THE CASE

I. Statutory Background

Congress enacted the ESA "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species." 16 U.S.C. § 1531(b). As the Supreme Court has found, the ESA is "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation" and "[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever

the cost.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180, 184 (1978).

The ESA directs the Secretary of Commerce, through NMFS, to list species it determines are endangered or threatened. *See* 16 U.S.C. § 1533(a). A species is “endangered” if it “is in danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6). A species is “threatened” if it is “likely to become an endangered species within the foreseeable future.” *Id.* § 1532(20). The definition of species includes subspecies. *Id.* § 1532(16).

Section 4 of the ESA sets forth a detailed process by which NMFS must add to or modify the list of threatened and endangered species via notice and comment rulemaking. 16 U.S.C. § 1533. Specifically, in making all listing determinations, NMFS must assess five categories of threats: (A) the present or threatened destruction, modification, or curtailment of a species’ habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) predation or disease; (D) the inadequacy of existing regulatory mechanisms; and (E) other manmade or natural factors affecting the species’ continued existence. *Id.* § 1533(a)(1). If a species is imperiled by any one or more of these five factors, NMFS *must* list the species. *Id.*; 50 C.F.R. § 424.11(c).

NMFS must base all listing determinations “solely on the basis of the best scientific and commercial data available.” 16 U.S.C. § 1533(b)(1)(A). The standard does not require perfect data. “[T]he ‘best scientific. . .data available,’ does not

mean ‘the best scientific data possible.’” *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 602 (9th Cir. 2014) (quoting *Bldg. Indus. Ass’n v. Norton*, 247 F.3d 1241, 1246 (D.C. Cir. 2001)). Requiring reliance upon the best available scientific data, as opposed to scientific certainty, “is in keeping with congressional intent” that an agency “take preventive measures *before* a species is ‘conclusively’ headed for extinction.” *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 679-80 (D.D.C. 1997).

Once a species is listed, an array of statutory protections applies. For example, Section 7 requires all federal agencies to ensure that their actions do not “jeopardize the continued existence” of any listed species. 16 U.S.C. § 1536(a)(2). Section 4(a)(3) requires NMFS to designate “critical habitat” for listed species, *id.* § 1533(a)(3), and Section 4(f) mandates that NMFS develop and implement recovery plans—a roadmap to how a listed species can eventually be secure from the risk of extinction and removed from the list of threatened and endangered species. *Id.* § 1533(f). In addition, the ESA authorizes NMFS to acquire land for the protection of listed species, and make federal funds available to states to assist in efforts to preserve and protect listed species. *Id.* §§ 1534; 1535(d).

II. Factual Background

Intervenor-Defendant adopts the Factual Background contained in Federal Defendants’ Opening Brief in the sections titled “Listing the Arctic ringed seal”

and “District Court Proceedings.” ECF No. 9 at 8-18.

SUMMARY OF THE ARGUMENT

The best available science shows that Arctic ringed seals are in danger of extinction within the foreseeable future because climate change will destroy the sea ice and snow cover they need to survive. NMFS’s decision to list the Arctic subspecies of ringed seals was therefore the right one under the law. This Court should reverse the district court’s decision stripping Arctic ringed seals of their ESA protections for two primary reasons.

First, the recent Ninth Circuit ruling in the Arctic bearded seal case is directly on point and suggests a similar result for Arctic ringed seals. In *Alaska Oil & Gas Ass’n v. Pritzker*, the Ninth Circuit upheld NMFS’s decision to list the bearded seal as threatened because NMFS considered the best scientific data available, and reasonably concluded there would be a continued loss of essential bearded seal sea ice habitat in light of that data and that a decrease in this habitat would likely have a significant adverse effect on the bearded seal population. 2016 U.S. App. LEXIS 19084, at *22-23. That is exactly what NMFS did in listing the Arctic ringed seal as threatened—NMFS relied on the best available climate models that conclude that sea ice and snow cover will significantly decline in the decades to come; analyzed the five listing factors in Section 4(a) in light of that science; and reasonably supported its conclusion that the ringed seal, a species

dependent on sea ice and snow cover, would likely become endangered in the foreseeable future. The ESA does not require more. *Id.*

Second, in overturning the Arctic ringed seal listing, the district court invented non-existent requirements and misconstrued the law in two key ways. Specifically, the district court conflated NMFS's finding that additional protective regulations under Section 4(d) were unnecessary with the findings required to list a species under the ESA. But such protective regulations are not relevant to the agency's decision to list a species in the first instance. *See* 16 U.S.C. §§ 1533(a), (d). The district court also erred by imposing heightened standards requiring an "articulated[,] discernable, quantified threat of extinction within the reasonably foreseeable future." ER29. Such standards are not prescribed by the ESA, and are the *exact same* standards the Ninth Circuit expressly overruled in upholding NMFS's decision to list bearded seals. *Alaska Oil & Gas Ass'n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *26-31. In other words, the district court's decision vacating NMFS's listing of the Arctic ringed seal is wrong for the same reasons its decision vacating ESA protections for bearded seals was wrong.¹

¹ The district court's decision in the ringed seal case relies heavily on its decision in the bearded seal case and the two decisions are verbatim at times. *See Alaska Oil & Gas Ass'n v. Pritzker*, No. 4:13-cv-00018-RRB, 2014 U.S. Dist. LEXIS 101446 (D. Alaska, July 25, 2014) (bearded seal decision); *Alaska Oil & Gas Ass'n v. Nat'l Marine Fisheries Serv.*, No. 4:14-cv-00029-RRB, 2016 U.S. Dist. LEXIS 34848 (D. Alaska, March 13, 2016) (ringed seal decision). The district court's ringed seal

At bottom, the district court's complaints about NMFS's listing decision are ones of timing—the district court would prefer that NMFS delay protections until there is total certainty about when Arctic ringed seals will lose their sea ice habitat and the snow cover necessary for their survival. But those complaints fundamentally misconstrue the statutory standard and run contrary to the ESA's fundamental purpose: to protect species with enough time to save them.

Under any reasonable evaluation, NMFS's listing decision was rational and complied with the ESA. This Court should therefore overturn the district court's ruling and reinstate protections for imperiled Arctic ringed seals.

STANDARD OF REVIEW

Intervenor-Defendant adopts the Standard of Review as stated in Federal Defendants' Opening Brief. ECF No. 9 at 22-25.

ARGUMENT

Intervenor-Defendant joins Federal Defendants' thorough Opening Brief, ECF No. 9, and provides additional support for a few key arguments.

I. NMFS Properly Found That Arctic Ringed Seals Will Likely Be in Danger of Extinction in the Foreseeable Future Because Climate Change Is Destroying the Species' Habitat

The district court should be reversed because NMFS's listing of Arctic

decision clearly cannot stand in light of the Ninth Circuit's decision in *Alaska Oil & Gas Ass'n v. Pritzker*, 2016 U.S. App. LEXIS 19084.

ringed seals complied with the ESA's mandates. In listing the Arctic ringed seal as threatened, NMFS made three findings: (1) Arctic ringed seals depend on sea ice and the ability to build snow caves for their survival; (2) sea ice and on-ice snow cover are declining and likely to dramatically decline over the coming decades; and (3) future loss of sea ice and snow cover is likely to render Arctic ringed seals in danger of extinction within the foreseeable future. Excerpts of Record ("ER"), ECF No. 10, at 75-76. In reaching these findings, NMFS relied on climate science that represents the international scientific consensus on climate change and the best available science that links declines in sea ice and snow cover to harmful biological responses that threaten the ringed seal's continued existence. Because NMFS has "drawn rational conclusions from the best available science," this Court should reinstate the Arctic ringed seal listing. *San Luis*, 747 F.3d at 633.

A. The Best Available Science Demonstrates that Arctic Ringed Seals Depend on Sea Ice and Snow Cover for Survival

As NMFS explained in its decision, the best available science shows that Arctic ringed seals depend on sea ice for survival—sea ice is the only surface where ringed seals give birth, nurse pups, and haul out to complete their annual molt. ER52; ER128; ER133. In fact, ringed seals are the most ice-dependent of all Arctic seals, and use sea ice habitats in ways that that other seals do not. ER124; ER52; ER378. Ringed seals use the claws on their flippers to make breathing holes in the ice that forms in late fall or early winter, which allow them to feed in coastal

waters under the ice while still maintaining enough places to surface and breathe. ER124; ER52-53. And unlike other seals, ringed seals excavate caves in the snow over their breathing holes forming subnivean lairs (i.e., “snow caves”), which they use for resting, giving birth, and nursing pups. ER53; ER124.

These snow caves are essential for the survival of ringed seals. *See e.g.*, ER75; ER206. Ringed seal pups are born primarily in April when temperatures, including wind chill effects, are as cold as -60°C . ER131. As pups are born without an insulating blubber layer, ER389-90, the insulation provided by snow caves is critical to pup survival, and sufficient snow roofs on the caves are crucial for providing thermal insulation, especially for the prevention of hypothermia. ER131; ER75; ER387. Snow caves are also essential to pup survival by providing physical concealment from predators during the long nursing period. ER131; ER387-388. Without these snow caves, pups freeze to death or are eaten by polar bears, Arctic foxes, or other animals. ER75; ER206. Indeed, studies show a *nearly 100 percent* pup mortality rate without such caves. ER206.

The best available science also shows that snow cover must be of sufficient depth for building lairs. Snow drifts of 45 cm or more are needed for excavation and maintenance of simple lairs, and birth lairs require depths of 50 to 65 cm or more. ER76. Such drifts typically only occur where average snow depths are at least 20-30 cm on flat ice and where drifting has taken place along pressure ridges

or ice hummocks. *Id.* Areas with less than 20 cm average snow depth in April are inadequate for the formation of ringed seal birth lairs. *Id.*; ER90.

Sea ice is essential to the formation of snow caves. The loss of sea ice as a platform to collect snow substantially reduces the amount of snow that can accumulate. ER87. Stable sea ice is also essential for the survival and fitness of pups throughout the nursing period that typically lasts through June. ER75; ER115.

In addition, sea ice is essential for ringed seals' annual molt, when ringed seals emerge from their snow lairs to haul out on the ice for long periods of time to shed and regrow their skin and hair, generally from late March through July. ER53. Ringed seals need to spend most of their time sleeping on ice during this physiologically demanding period. *Id.* Thus, persistence of the sea ice during the molting period is critical to allowing ringed seals adequate time to complete their molt. ER378.

Accordingly, scientists have concluded that the timing of ice break-up and depth of snow cover are "the key factors" affecting reproduction and population trajectories of ringed seals. ER224; ER80. The Biological Review Team, a scientific team assembled by NMFS to assess the best scientific data available concerning the status of and threats to the ringed seal, determined that the key limiting factor for ringed seal survival is the forecasted reduction in spring snow cover, caused by both early snow melts and increasingly late ice formation. ER308.

NMFS therefore determined that the greatest threat to ringed seals is loss of sea ice and snow coverage from climate change. ER74.

B. The Best Available Science Shows Climate Change Will Cause a Dramatic Loss of Sea Ice and Snow Cover Through the End of the Century

The best available science shows that the sea ice that Arctic ringed seals depend upon for survival is melting. Indeed, as the Ninth Circuit recently recognized in upholding NMFS's listing of the bearded seal as threatened based on loss of its sea ice habitat, "[t]here 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." *Alaska Oil & Gas Ass'n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *18.

The Intergovernmental Panel on Climate Change ("IPCC") is an international body that produces objective reports representing a synthesis of the best available and most comprehensive scientific data on climate change. ER 159. In its Fourth Assessment Report, the most recent report at the time NMFS issued its ringed seal listing decision, the IPCC found that "warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level." ER163 (quoting IPCC). The IPCC is also confident that "[a]nthropogenic warming and sea level rise would continue for centuries due to

the time scales associated with climate processes and feedback, even if [greenhouse gas] concentrations were to be stabilized.” *Id.* NMFS relied on the IPCC’s Fourth Assessment Report, and other studies and models that confirm the IPCC’s findings, in listing the ringed seal. ER87. NMFS noted that the observed rate of Arctic sea ice loss has been greater than what is indicated in the IPCC’s models, suggesting that the IPCC’s projections of sea ice declines within this century may be conservative. ER89; *see also Alaska Oil & Gas Ass’n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *21-22 (recognizing the IPCC models understate the speed at which Arctic temperatures are rising and that observational data indicate current sea ice losses appear to be decades ahead of the modeled values).

As described in NMFS’s decision, the climate and sea ice projections clearly show a continuing, and likely accelerating, warming trend through the end of the century, which will correspond with a loss in sea ice. ER89. For example, the models show that sea ice in November—when on-ice snow coverage reaches nearly 70 percent of its maximum depth—will severely decrease by the end of the century throughout most of the ringed seal’s range. ER58. Some models show an ice-free Arctic in November, except for the Canadian Arctic Archipelago. ER177.

There is also broad scientific consensus that snow cover has declined in recent decades and will continue to do so in the future. ER76. Scientists expect that snow accumulation on Arctic sea ice will decrease by nearly 50 percent within this

century, with more than half of that decline occurring before mid-century. ER200. In particular, the models show that by mid-century, there will be inadequate snow cover in April for Arctic ringed seals to build and maintain their snow caves in the Bering Sea, the Barents Sea, Hudson Bay, and other large areas of the seals' range including Baffin Bay, the Chukchi, Sea, the Beaufort Sea, and the East Siberian Sea. ER228-30. Indeed, the Bering Sea, the southern portion of the seal's range, is predicted to have less than 5 cm of snow cover—well below the accumulation ringed seals need—by mid-century. ER203; ER229.

By 2100, average snow depths will fail to meet the 20–30 cm minimum needed for successful formation and maintenance of birth lairs across much of the Arctic ringed seals' range. ER201; ER203. Specifically, by the end of the century, April snow depths of 20–25 cm are forecasted for only a portion of the central Arctic, most of the Canadian Arctic Archipelago, and a few small isolated areas in a few other regions. ER74. By 2090–2099, areas with 25–30 cm of snow are projected to be limited to a few small isolated pockets in the Canadian Arctic. *Id.*

NMFS's reliance on these studies to predict sea ice and snow cover loss through 2100 was the proper course of action under the ESA. Indeed, to ignore these studies and trends would be to ignore the best available science—something the ESA expressly prohibits. *See* 16 U.S.C. § 1533(b)(1)(A) (requiring reliance on the best available science in making listing determinations); *Alaska Oil & Gas*

Ass'n v. Pritzker, 2016 U.S. App. LEXIS 19084, at *17 (recognizing the IPCC's models as the best available science on climate change).

While there is increased uncertainty in the models regarding the precise magnitude and timing of losses in sea ice and snow cover after 2050, “[t]he ESA does not require NMFS to make listing decisions only if underlying research is ironclad and absolute.” *Alaska Oil & Gas Ass’n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *19. Together, the models show a warming trend that “is clear and unidirectional” and that loss of sea ice and reduced snow cover will continue, and likely increase, throughout the 21st century to the point at which adequate snow cover will be nearly non-existent throughout the range of Arctic ringed seals. ER89. Such losses will likely cause ringed seals to vanish from substantial portions of their range. ER94; ER117-18.

C. The Best Available Science Shows that Loss of Sea Ice and Snow Cover Because of Climate Change Threaten Arctic Ringed Seals with Extinction Within the Foreseeable Future

The best available science also shows that the loss of sea ice and snow cover will cause a precipitous decline in the Arctic ringed seal population, and to such an extent that they likely will vanish from most of the places they live within the foreseeable future. As repeatedly explained by NMFS in its decision under review, Arctic ringed seals face unique threats from climate change given their reliance on snow accumulation to build snow caves. Decreased snow cover due to climate

change will likely inhibit their inability to build these essential caves, leading to widespread pup mortality and the extirpation of the species across most of its range. ER223-24; ER94.

As NMFS explained in the final rule, “projected decreases in ice and, especially, snow cover are expected to lead to increased pup mortality from premature weaning, hypothermia, and predation.” ER76. These findings were based on several studies showing that pups cannot survive without enough snow for snow caves. One study showed that ringed seal recruitment dropped sharply *to near zero* when average snow depths were less than 32 cm; another study documented a *nearly 100 percent mortality* rate when pups were born without a cave; and other studies found that warming temperatures that melt snow-covered birth layers can result in pups suffering from hypothermia or freezing to death. ER206-07; ER223-24. NMFS also explained that the ringed seal’s long generation time and ability to produce only a single pup each year will inhibit its ability to adapt to the diminishing ice and snow cover projected in a matter of decades. ER59; ER75. Accordingly, NMFS found that “within the foreseeable future it is likely that the number of Arctic ringed seals will decline substantially, and they will no longer persist in substantial portions of their range.” ER94.²

² NMFS also determined that climate change will exacerbate other threats to ringed seals, including ocean acidification, which may impact ringed seal survival by

In short, NMFS's decision to list the Arctic ringed seal is based upon the best available scientific evidence that conclusively links declines in sea ice and snow cover to substantial negative biological responses in ringed seals that threaten the species' continued existence. Although climate and sea ice models cannot predict exactly when there will be so little sea ice and snow cover that ringed seals can no longer persist, the models do predict that—absent intervention—that day will come within this century. The available science does not allow for more specificity, nor does the ESA allow courts to demand it. *Alaska Oil & Gas Ass'n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *19-20.

II. The District Court's Decision Invented Requirements for Listing Ringed Seals that Do Not Exist in the ESA

The district court's decision overturning NMFS's well-reasoned, well-supported decision was based on fundamental misunderstandings of the relevant law and is wholly inconsistent with Ninth Circuit precedent, including the Ninth Circuit's recent decision upholding ESA protections for bearded seals. *See generally Alaska Oil & Gas Ass'n v. Pritzker*, 2016 U.S. App. LEXIS 19084. Indeed, the district court's reasoning for vacating the Arctic ringed seal listing is nearly word for word the same as its recently overturned decision vacating ESA protections for bearded seals, and it is wrong for the same reasons. Contrary to the

impairing their ability to find food. ER76-77. Climate change will also exacerbate threats from oil and gas development, contaminants, and shipping. ER78-80.

district court's beliefs, NMFS did not need to find that ringed seals needed additional safeguards beyond those provided by a threatened listing, nor did NMFS need to conduct new studies or wait for quantitative data before listing the species.

A. NMFS Was Not Required to Find that Ringed Seals Required Additional Protective Action Beyond the Protections Provided By Listing

The ESA lacks any requirement that NMFS find additional protective regulations are needed for threatened species as a prerequisite to listing. In overturning NMFS's decision to list the Arctic ringed seal, the district court held that NMFS's decision was arbitrary and capricious because the agency declined to extend additional protections available under Section 4(d). ER29. But such a requirement would turn the ESA listing process on its head. The court's holding shows that it fundamentally misunderstands the ESA.

Additionally, the district court's unfounded conclusion that listing "provides no additional action intended to preserve the continued existence" of Arctic ringed seals, ER30, is simply wrong. That is *precisely* what listing ringed seals under the ESA does—a threatened listing triggers several significant protections, including Section 7 consultation, critical habitat designation, and recovery planning.

1. *NMFS's Decision Not to Adopt a Separate 4(d) Rule Is Not Relevant to Whether Ringed Seals Should Be Listed as Threatened*

The district court's illogical theory that NMFS somehow invalidated the listing rule by electing not to adopt a rule under Section 4(d) clearly contradicts the

plain language of the ESA. The statute specifies five factors NMFS must consider in deciding whether to list a species. 16 U.S.C. § 1533(a)(1). If a species is imperiled by any one or more of these five factors, NMFS must list the species. *Id.*; 50 C.F.R. § 424.11(c). These are the only listing factors that NMFS can consider.

Section 4(d) is a separate provision that is relevant only once NMFS decides to list a species as threatened. *See* 16 U.S.C. § 1533(d) (“[w]henver any species is listed as a threatened species...”) (emphasis added). Specifically, under Section 4(d) NMFS may adopt additional protective measures for threatened species via rulemaking if “necessary and advisable to provide for the conservation of such species.” *Id.* This provision allows NMFS to extend additional protections—such as the Section 9 take prohibitions afforded to endangered species—to threatened species. *Id.* Section 4(d) is not a listing factor, and conflating it with the listing process conflicts with the ESA listing provisions. There is simply no way to square the district court’s holding with the ESA’s clear framework for listing species.

2. Listing Arctic Ringed Seals as Threatened Provides Several, Vital Conservation Benefits

A threatened listing for ringed seals provides an important safety net through concrete legal protections. The district court erred in finding that the listing “provides no additional action intended to preserve the continued existence of the listed species.” ER30. The district court overlooked vital protections the ESA affords species listed as threatened, including Section 7 consultation, 16 U.S.C. §

1536(a)(2), critical habitat designation, *id.* § 1533(a)(3), and recovery planning. *Id.* § 1533(f). Indeed, the entire purpose of listing a species is to trigger these needed protections as they are not provided for in any other statute or regulation.

For example, Section 7 of the ESA—which the Ninth Circuit has described as the “heart of the ESA,” *W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 495 (9th Cir. 2011)—requires federal agencies to consult with NMFS when their actions may affect listed species or critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). “The purpose of consultation is to obtain the expert opinion of wildlife agencies to determine whether the action is likely to jeopardize a listed species or adversely modify its critical habitat and, if so, to identify reasonable and prudent alternatives that will avoid the action’s unfavorable impacts.” *Karuk Tribe of Cal. v. U.S. Forest Serv.*, 681 F.3d 1006, 1020 (9th Cir. 2012) (en banc). In addition, NMFS may also “suggest modifications” to the action during consultation to “avoid the likelihood of adverse effects” to the listed species even when not necessary to avoid jeopardy. 50 C.F.R. § 402.13.

The district court irrationally discounted the significance of Section 7 consultation. It is not clear why the district court did so, especially when most of the activities likely to directly affect Arctic ringed seals will be permitted by the federal government and therefore subject to consultation. The final rule explains that such activities 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.” ER84.

In addition, the district court wholly failed to acknowledge the important protections of critical habitat, a cornerstone of the ESA. In enacting the ESA, Congress was extremely sensitive to the importance of protecting habitat for the survival and recovery of imperiled species. Congress explicitly wrote the ESA to conserve “the ecosystems upon which endangered species and threatened species depend.” 16 U.S.C. § 1531(b). Legislative history shows Congress saw critical habitat as perhaps the most important element of the ESA: “[C]lassifying a species as endangered or threatened is only the first step in insuring its survival. *Of equal or more importance is the determination of the habitat necessary for the species’ continued existence.*” H.R. Rep. No. 94-887, at 3 (1976) (emphasis added). Time has proven the wisdom of Congress’ approach—studies show that species with designated critical habitat are *more than twice as likely* to be recovering, and less than half as likely to be declining, than species without designated critical habitat.³

A critical habitat designation provides several additional benefits beyond those of the Section 7 consultation process. For example, critical habitat identifies

³ See Taylor, M.F.J., K.S. Suckling, and J.J. Rachlinski JJ. 2005. The effectiveness of the Endangered Species Act: A quantitative analysis. *BioScience* 55:360–67, available at <http://www.biologicaldiversity.org/publications/papers/bioscience2005.pdf>.

those geographical areas most vital to the species. Without a critical habitat designation, the process of identifying the most important habitat features “will be made piecemeal, as individual federal projects arise.” *Conservation Council v. Babbitt*, 2 F. Supp. 2d 1280, 1288 (D. Haw. 1998). Moreover, “the designation of a critical habitat educates the public as well as state and local governments, and affords them the opportunity to participate in the designation.” *Id.*

The district court also ignored the additional protections that recovery planning under the ESA provides. Section 4(f) mandates that NMFS develop and implement recovery plans for the conservation and survival of listed species. 16 U.S.C. § 1533(f). A recovery plan includes criteria for recovery and management actions that provide a roadmap for a species to be removed from the ESA-list. Recovery planning for ringed seals can include measures to mitigate or avoid actions that exacerbate climate change, among other things.

In short, the district court erred in holding that NMFS’s listing decision was arbitrary and capricious because it did not provide additional protections for ringed seals. NMFS’s decision not to adopt additional protections by issuing a separate Section 4(d) rule does not in any way affect the validity of the underlying listing.

B. NMFS Must Base Its Listing Decision Solely on the Best Available Scientific Data, Which Does Not Require New Studies or Quantitative Data

Contrary to the district court’s unfounded conclusions, the ESA does not require NMFS to conduct new studies prior to listing a species or establish an

“extinction threshold”—a specific numerical population decline needed to list a species. Indeed, such requirements would be antithetical to the ESA’s fundamental principle that NMFS act to protect imperiled species while there is still time to save them. *See e.g., Alaska Oil & Gas Ass’n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *29 (NMFS “need not wait until a species’ habitat is destroyed to determine that habitat loss may facilitate extinction”).

1. The ESA Does Not Require NMFS to Conduct New Studies Prior to Listing Arctic Ringed Seals

The ESA does not mandate perfect scientific information, rather the ESA requires listing decisions be based on the best available science. The district court’s holding that listing the Arctic ringed seal as threatened was “simply too speculative” because the existing body of information regarding the ringed seal population and trends was limited and that “additional studies were needed to understand the population dynamics and habitat of the ringed seal,” ER28; ER29, is wrong. This holding misconstrues both the requirements and purpose of the ESA, and ignores well-established case law.

The statute requires the agency to consider the best *available* science, not science that does not yet exist. *See* 16 U.S.C. § 1533(b)(1)(A) (requiring that listing decisions be made “solely on the basis of the best scientific and commercial data available”). Consistent with this statutory language, courts have repeatedly emphasized that the ESA requires the agency consider only *existing* data in making

a listing determination. “[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.’” *San Luis*, 747 F.3d at 602 (quoting *Bldg. Indus. Ass’n*, 247 F.3d at 1246); *see also, e.g., Sw. Ctr. for Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000) (explaining that “[e]ven if the available scientific and commercial data were quite inconclusive, [the agency] may—indeed must—still rely on it”). And the ESA does not allow a court to require additional studies before a listing determination may be made. *Sw. Ctr. for Biological Diversity*, 215 F.3d at 60.

Here, the best available science indicates a serious decline in ringed seal essential life functions in the foreseeable future due to disappearing sea ice and on-ice snow coverage. NMFS rationally explained how the best available science demonstrates that habitat loss due to melting sea ice and loss of snow cover means the ringed seal is likely to become in danger of extinction by the end of the century. ER89; ER94. The statute requires nothing more.

2. *NMFS Can List Arctic Ringed Seals Based on Qualitative Data, and Does Not Need to Wait for Quantitative Data*

The district court also erred in finding NMFS’s decision unlawful because it did not establish an extinction threshold, a specific timeframe in which ringed seals would fall to that threshold, or otherwise use quantitative data. ER 28; ER29. As with its decision in the bearded seal case, “the district court’s efforts to impose

requirements for which data is unavailable or does not exist is at odds with the ESA.” *Alaska Oil & Gas Ass’n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *27.

The ESA simply requires NMFS to use the “best scientific and commercial data available” in evaluating the five listing factors; it does not mandate the form this data takes. 16 U.S.C. § 1533(b)(1)(A). Moreover, the ESA states that a species qualifies as “threatened” when it 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) (emphasis added). The ESA does not define “likely;” thus, as the Ninth Circuit recently held, NMFS is under no obligation to define it in a way that requires precise quantitative targets. *Alaska Oil & Gas Ass’n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *30-31 (noting that NMFS interprets “likely” consistent with its ordinary meaning of more probable than not).

Here, NMFS used a qualitative risk assessment—a common procedure used in numerous other ESA listing determinations—in the absence of available quantitative data on future ringed seal population levels. *See* Fed. Def. Br., ECF No. 9 at 30-32 (explaining qualitative approaches in other listing decisions). NMFS used such an assessment after determining it could reliably link future declines in specific sea ice habitat and snow cover to adverse impacts on ringed seal survival rates based on the available scientific, qualitative evidence. ER74. For example, studies in the record document, *inter alia*, a nearly 100 percent pup mortality rate

without adequate snow to form snow caves, ER75; ER206, and that the ringed seal's long generation time and ability to produce only a single pup each year will inhibit its ability to adapt to the projected diminishing ice and snow cover. ER75.

These studies led NMFS to determine that climate change will cause a precipitous decline in the Arctic ringed seal population to the point where they will be extirpated in a substantial part of their range within the foreseeable future. ER94. NMFS "drew rational conclusions from the best available scientific data, which is what the [ESA] requires." *Alaska Oil & Gas Ass'n v. Jewell*, 815 F.3d 544, 562 (9th Cir. 2016).

Nevertheless, the district court found NMFS's rule listing the Arctic ringed seal arbitrary and capricious because of the lack of quantitative data regarding ringed seals' ability to cope with changes in sea ice and snow cover, and because NMFS failed to define an "extinction threshold" for ringed seals or a "specified time" at which the ringed seal population would decline to that threshold. ER 28-29. As with its decision in the bearded seal case, the district court's reasoning would require NMFS wait to list Arctic ringed seals until it had highly specific data regarding the population's tipping point and exactly when there would be so little ice and snow cover that the population would decline to that point. *See Alaska Oil & Gas Ass'n v. Pritzker*, 2016 U.S. App. LEXIS 19084, at *27-28. "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 [Arctic ringed seal's] survival over the next 85 years.” *Id.* at *28. As such, NMFS need not wait until the ringed seal's habitat is destroyed to protect the species under the ESA. *Id.* at *29.

3. *NMFS Was Required to List the Arctic Ringed Seal With Enough Time to Prevent Extinction*

The ESA requires NMFS to take action to protect species before they are conclusively headed for extinction. Accordingly, the definition of and analysis regarding a threatened species is necessarily forward looking and predictive— “[t]he purpose of creating a separate designation for species which are ‘threatened’, in addition to species which are ‘endangered’, was to try to ‘regulate these animals before the danger becomes imminent while long-range action is begun.’” *Defenders of Wildlife v. Babbitt*, 958 F. Supp. at 680 (quoting S. Rep. No. 307, 93d Cong. 1st Sess. 3 (1973)).

Indeed, as the Ninth Circuit has noted, the purpose of the ESA is “not only to protect the last remaining members of the species but to take steps to insure that species which are *likely to be threatened* with extinction never reach the state of being presently endangered.” *Defenders of Wildlife v. Norton*, 258 F.3d 1136, 1142 (9th Cir. 2001) (quoting legislative history, emphasis added); *see also AOGA v.*

Jewell, 815 F.3d at 555 (the ESA is “concerned with protecting the future of the species, not merely the preservation of existing [animals]”).

Nevertheless, the district court would prefer that NMFS delay protections until there is total certainty about when Arctic ringed seals will lose their sea ice habitat and the snow cover necessary for their survival. But habitat destruction from climate change, the primary threat to the species, is relatively unique in that habitat loss and degradation will not stop even if all greenhouse gas pollution was immediately curtailed because carbon dioxide continues to reside in the atmosphere for centuries, and there is a time lag between emissions and climactic changes. ER163. Thus, deferring protection until some unstated point in the future when climate change and Arctic ringed seal population modeling are verified would be too late and condemn the species to extinction. This is precisely what the ESA is meant to prevent. *Defenders of Wildlife v. Norton*, 258 F.3d at 1142.

In the face of clear scientific data that the sea ice and snow cover essential to ringed seal survival will continue to decline throughout this century, ER82; ER117, NMFS’s decision to list Arctic ringed seals “is in keeping with congressional intent” that NMFS “take preventative measures *before* a species is ‘conclusively’ headed for extinction.” *Defenders of Wildlife v. Babbitt*, 958 F. Supp. at 679-80.

CONCLUSION

In sum, NMFS fully complied with the ESA in listing the Arctic ringed seal

as a threatened species. The district court's decision invalidating NMFS's listing rule improperly stripped ringed seals of crucial protections in the face of climate change, melting sea ice, and disappearing snow cover. Intervenor-Defendant therefore respectfully requests that this Court reverse the district court's judgment and uphold NMFS's rule listing the Arctic ringed seal as threatened.

Respectfully submitted this 1st day of November, 2016,

s/ Kristen Monsell

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STATEMENT OF RELATED CASES

Pursuant to Circuit Rule 28–2.6, Intervenor-Defendant states that it is not aware of any related cases pending before this Court.

CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the requirements of Fed. R. App. P. 32(a)(5) and (6) because it has been prepared in 14-point Times New Roman, a proportionally spaced font. I further certify that this brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because it contains 6,969 words, excluding the parts of the brief exempted under Fed. R. App. P. 32(a)(7)(B)(iii), according to the count of Microsoft Word.

s/ Kristen Monsell
Kristen Monsell

CERTIFICATE OF SERVICE

I hereby certify that on November 1, 2016, I electronically filed the foregoing with the Clerk for the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system. The participants in the case are registered CM/ECF users and service will be accomplished by the appellate CM/ECF system.

s/ Kristen Monsell
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