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IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF ALASKA

CENTER FOR BIOLOGICAL DIVERSITY,

Plaintiff,

v.

DAVID BERNHARDT, in his official capacity as Secretary of the United States Department of the Interior, et al.,

Defendants.

Case No. 3:18-cv-00064-SLG

DEFENDANTS' MEMORANDUM IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

TABLE OF CONTENTS

PAGE

INTRO	ODUCTION	1
STAT	UTORY BACKGROUND	2
FACT	UAL BACKGROUND	4
I.	The Pacific Walrus	4
II.	The 2011 Finding	5
III.	The Species Status Assessment and 2017 Finding	7
STAN	DARD OF REVIEW	10
ARGU	JMENT	10
I.	The Record Demonstrates that FWS Based the 2017 Finding on New Scientific Evidence Developed After the 2011 Finding	10
II.	FWS's Determination that the Foreseeable Future is 2060 is Reasonable and Supported by the Record.	14
А	. FWS Reasonably Defined the Foreseeable Future Based on the Best Available Science on the Walruses' Response to the Loss of Sea Ice	15
В.	. FWS's Species-Specific Assessment of the Foreseeable Future is Reasonable and Based on the Latest Data on the Walruses' Response to the Loss of Sea Ice	17
C.	. Relying on the Science Team's Expert Assessment of the Best Available Science, FWS Reasonably Concluded that Predictions Regarding the Walruses' Response to Sea-Ice Loss are Reliable only until 2060	20
III.	CBD's Remaining Arguments Mischaracterize the Basis for the 2017 Finding and Lack Support in the Record and Law	23
A	. FWS Reasonably Found It Could Not Make Reliable Predictions About Walrus Behavior Beyond 2060	23

В.	FWS Did Not Improperly Rely on "Inconclusive" Current Population Size or Trend Data	.28
С.	FWS Did Not Arbitrarily "Dismiss" Subsistence Hunting	.31
D.	FWS Did Not Treat all Habitat as Equal or Disregard a Threat from Coastal Erosion.	.32
E.	Contrary to CBD's Argument, FWS was Not Required to Treat all "Uncertain" Information the Same.	.34
CONCI	JUSION	.35

TABLE OF AUTHORITIES

CASES PAG	GE
Alaska Oil & Gas Ass'n (AOGA) v. Pritzker, 840 F.3d 671 (9th Cir. 2016)pass	sim
<i>CBD v. FWS</i> , 342 F. Supp. 3d 968 (N.D. Cal. 2018)	, 23
CBD v. Lubchenco, 758 F. Supp. 2d 945 (N.D. Cal. 2010)	, 19
<i>CBD v. Zinke,</i> 900 F.3d 1053 (9th Cir. 2018)	, 21
Defenders of Wildlife v. Babbitt, 958 F. Supp. 670 (D.D.C. 1997)	, 35
Federal Communications Commission v. Fox Television Stations, 556 U.S. 502 (2009)	, 13
Friends of Alaska National Wildlife Refuges v. Bernhardt, 2019 WL 1437596 (D. Alaska Mar. 29, 2019)	12
In re Polar Bear Litig., 709 F.3d 1 (D.C. Cir. 2013)	, 28
Lands Council v. McNair, 537 F.3d 981 (9th Cir. 2008)	10
Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)	, 34
National Wildlife Federation v. NMFS, 184 F. Supp. 3d 861 (D. Or. 2016)	, 35
Organized Village of Kake v. U.S. Dep't of Agric., 794 F.3d 956 (9th Cir. 2015)	13
Ranchers Cattlemen Action Legal Fund United Stockgrowers of Am. v. U.S. Dep't of Agric., 499 F.3d 1108 (9th Cir. 2007)	10

River Runners for Wilderness v. Martin, 593 F.3d 1064 (9th Cir. 2010)	
Sierra Club v. Bureau of Land Mgmt., 786 F.3d 1219 (9th Cir. 2015)	
<i>Trout Unlimited v. Lohn</i> , 559 F.3d 946 (9th Cir. 2009)	
Western Watersheds Project v. Ashe, 948 F. Supp. 2d 1166 (D. Idaho 2013)	

STATUTES

5 U.S.C. § 706	
5 U.S.C. § 706(2)(A)	
16 U.S.C. §§ 1371	
16 U.S.C. § 1531(b)	2
16 U.S.C. § 1532(20)	1, 2, 14, 20
16 U.S.C. § 1533(a)(1)	
16 U.S.C. § 1533(b)(1)(A)	
16 U.S.C. § 1533(b)(3)(B)	
16 U.S.C. § 1533 (b)(3)(C)(i)	11
16 U.S.C. § 1533(b)(6)(A)	

FEDERAL REGULATIONS

50 C.F.R. § 402.01(b)	2
50 C.F.R. § 424.16(c)(2)	3

INTRODUCTION

The Pacific walrus ("walrus") is a healthy, numerous, intelligent, and adaptable species of pinniped that to date has not been significantly affected by the decline in summer sea-ice in the Arctic. Given its current population size and status, it is not currently in danger of extinction, *i.e.*, "endangered" within the meaning of the Endangered Species Act ("ESA"), and Plaintiff Center for Biological Diversity ("CBD") makes no serious claim that it is. The real issue for the United States Fish and Wildlife Service ("FWS") in the challenged 2017 finding then was whether, given projected future sea-ice decline under various climate-change scenarios, the walrus is "threatened" within the meaning of the ESA, i.e., "*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).

In 2011, FWS made a preliminary finding that listing the walrus under the ESA was warranted, but a number of critical facts changed between 2011 and 2017. New satellite tracking data now shows that walrus prey is nearer to the walruses' alternate land-based habitat and that walruses can travel much farther distances to forage than previously understood. Mortalities at land-based walrus costal haulouts have not continued at high levels, partly as a result of improved management. Contrary to FWS's prediction in 2011 that subsistence harvest would continue at the higher numbers of the decade prior, harvest in fact had fallen by more than half. The picture that emerged was humbling: some of FWS's key assumptions underlying the 2011 finding had proved inaccurate and the walrus appeared more adaptable than previously thought. FWS accordingly convened a "Science Team," including outside walrus experts, to assess, among other things, the potential impacts of future sea-ice decline.

The outcome of that exercise was clear: while all experts acknowledged that the walruses' preferred sea-ice habitat would decline in summer and fall to 2100, they were uncertain about, and disagreed about, the species' potential response to sea-ice decline out to century end.

Based on the available scientific data before it, FWS concluded that it could not reliably predict the walruses' response to climate change beyond 2060. Nor could FWS find it was likely that the species would decline from its current relatively healthy and non-endangered state to the point of becoming in danger of extinction in the foreseeable future, as required for a threatened listing under the ESA. CBD ultimately wants a different prediction as to how sea-ice decline will affect the walrus population, but FWS's determination is rational, fully explained in the record, and entitled to substantial deference by this Court under the applicable standard of review. Therefore, it should be upheld.

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). The ESA directs the Secretary¹ to determine which species should be listed as threatened or endangered. *Id.* § 1533(a)(1). An endangered species is one that is "in danger of extinction throughout all or a significant portion of its range," while a threatened species is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." *Id.* § 1532(20), (6).

¹ The Secretary of the Interior has jurisdiction over the walrus. The Secretary has delegated his ESA responsibilities to FWS. *See* 50 C.F.R. § 402.01(b).

A species may be listed as an endangered species or threatened species under the ESA in one of two ways: either on the initiative of the Secretary or as a result of a petition submitted by an "interested person." *Id.* § 1533(b)(3)(A). In response to a petition, the Secretary is first required to publish an initial finding concluding whether the petition presents substantial information indicating that the petitioned action may be warranted (known as a "90-day finding"). *Id.* If a 90-day finding is positive, the Secretary is required to make a finding within 12 months stating whether the petitioned action is warranted, not warranted, or warranted but precluded by other pending proposals (known as a "12-month finding"). *Id.* § 1533(b)(3)(B).

If the listing of a species is warranted but precluded, the species is designated a "candidate" for listing, and the Secretary must annually review the petition until he or she determines that listing is either warranted or not. *Id.* § 1533(b)(3)(C)(i). If the petitioned action is warranted, the Secretary must promptly publish in the Federal Register "a general notice and the complete text of a proposed regulation to implement [the listing]" and provide for a 60-day public comment period. *Id.* § 1533(b)(3)(B)(ii); 50 C.F.R. § 424.16(c)(2). The Secretary must make a final listing determination within 12 months (or 18 months if there is "substantial disagreement regarding the sufficiency or accuracy of the available data"). 16 U.S.C. § 1533(b)(6)(A), (b)(6)(B)(i), (iii). A final listing determination can be either a regulation to implement the proposed rule or withdrawal of the proposed rule if the Secretary determines that the species is not endangered or threatened. *Id.* § 1633(b)(6)(A)(i).

The ESA directs the Secretary to determine whether a species should be listed because of one or more of the five listing 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; and (E) other natural or manmade factors affecting its continued existence. *Id.* § 1533(a)(1). The determination whether to list a species must be made "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 . . . to protect such species." *Id.* § 1533(b)(1)(A).

FACTUAL BACKGROUND

I. The Pacific Walrus

The walrus is one of the largest extant pinnipeds (i.e., fin- or flipper-footed marine mammals) in the world. PW0000402. Adult female walruses can grow to be 9.5 feet long and weigh more than 2,400 pounds, while adult males can surpass 11 feet and 4,400 pounds. *See id.* Walruses of both sexes are easily distinguished from other pinnipeds by their prominent tusks. *Id.* Preliminary survey results from a study conducted in 2014 estimate a total population size of 283,213. PW0000819-20.

The species' range extends across the continental shelf waters of the Bering and Chukchi Seas, with some walruses occasionally moving into the East Siberian and Beaufort Seas. PW0000819. Walruses are highly mobile, and their distribution can change markedly from one year to the next depending on annual and seasonal variations in sea-ice cover. *Id.*

Walruses generally spend the winter breeding season in the northern Bering Sea, where they rest on broken pack ice when not foraging for food. *Id.*; PW0000407. As spring approaches and the ice in the Bering Sea begins to melt, most walruses migrate north. PW0000409. However, thousands of adult male walruses as well as some females and juveniles remain in the Bering Sea year round. *Id.* Although the ice in the Bering Sea melts during the summer, these walruses use land that is accessible to them (known as coastal haulouts) instead of pack ice as resting areas. PW0000819.

The walruses that migrate north generally summer in the Chukchi Sea. PW0000410. In years when broken sea ice is abundant, walruses are typically found on ice over continentalshelf waters. *Id.* If sea-ice conditions are right, some animals go to the Beaufort and Eastern Siberian Seas. *Id.* As the ice in the Chukchi Sea recedes during the summer, the walruses move to nearby coastal haulouts. *Id.* In late September and October, walruses that summered in the Chukchi, Beaufort, and Eastern Siberian Seas usually begin migrating south in advance of developing sea ice. *Id.*; PW0000819. Soon thereafter, the walruses that summered in the coastal haulouts in the Bering Sea begin moving north. PW0000410. The two groups of walruses meet in the northern Bering Sea for the winter breeding season. *See id.*

II. The 2011 Finding

On February 10, 2011, FWS issued a 12-month finding on CBD's petition to list the walrus under the ESA. PW0000106-51. In the finding, FWS identified existing stressors to the walrus and any stressors that could occur in the foreseeable future. *See* PW0000111-44. FWS then determined whether any of those stressors, alone or in combination with other stressors, affected the species to such a degree that it qualified as threatened or endangered pursuant to the ESA's five listing factors. *Id.*; *see* 16 U.S.C. § 1533(a)(1).

FWS began its analysis by examining the stressors associated with the loss of sea ice due to climate change. PW0000112-26. To determine the amount of sea ice that will be lost in the foreseeable future, FWS primarily relied on the Intergovernmental Panel on Climate Change ("IPCC")'s Fourth Assessment Report, which "project[ed] plausible [climate change] outcomes globally and regionally, including projections of temperature and Arctic sea-ice conditions through the 21st century," and the 2010 Douglas report, which applied climate-change projections to the Bering and Chukchi Seas. PW0000113-15. Applying these scientific projections to the walrus, FWS determined that sea-ice loss would result in the species being increasingly dependent on coastal haulouts. PW0000117. FWS concluded that this dependence would negatively impact walruses in two ways.

First, "[t]he presence of large numbers of walruses at a coastal haulout over an extended time period could eventually lead to localized prey depletion." PW0000118. Walruses could respond to prey depletion by either seeking out other coastal haulouts that have suitable foraging areas or foraging further away from their current haulouts, both of which could result in increased energetic costs and reduced body condition. *Id.* At the time of the 2011 finding, the available science suggested that dependence on coastal haulouts could disproportionately affect females with dependent calves as they cannot travel as far as male walruses to forage for food. *See id.*; PW0010557. Second, FWS determined that increased use of coastal haulouts could lead to a "much greater frequency" of disturbances and trampling events. PW0000120.

FWS also determined that subsistence harvesting was a stressor that affected walruses. "[I]f subsistence harvest continues at current levels, as expected, it represents a threat to the walrus population in the foreseeable future" as harvesting would become unsustainable. PW0000129-30. FWS found that there were no regulatory mechanisms that adequately addressed the threats of either sea-ice loss or subsistence harvest. PW0000137.

FWS examined many other potential stressors to the walrus including the impacts of:

sea-ice loss on breeding and calving; ocean warming; ocean acidification; walruses being used for recreational, scientific, or educational purposes; United States import and export; commercial harvest; disease; parasites; predation; contaminants; oil and gas exploration, development, and production; commercial fishing; shipping; oil spills; and ice breaking. PW0000116-17; PW0000120-43. FWS determined that none of these stressors were population level threats to the walrus in 2011 or in the foreseeable future. *See id.*

After examining all of the best scientific information available in 2011, including the estimated population size of 129,000 walruses, FWS concluded that listing the walrus as a threatened or endangered species was warranted but precluded by higher priority listing actions. PW0000106; PW0000110-11.

III. The Species Status Assessment and 2017 Finding

In May 2017, FWS finalized a Species Status Assessment ("SSA") for the walrus. The purpose of an SSA is to "synthesize the best scientific and commercial information available for assessing the current and future status of [a species]" into a single document. PW0000401. FWS uses an SSA to inform decisions pertaining to a species, including whether to list a species as threatened or endangered. *See* PW0000820.

The walrus SSA used the best information available in 2017 to examine the same stressors and potential stressors to walruses FWS identified in the 2011 finding. PW0000424-507. For example,² to determine the extent of sea-ice loss, FWS used a range of modeling projections from the IPCC's Fifth Assessment Report issued in 2013. PW0000478. One of

² The new information discussed in this section is not inclusive. FWS examined dozens of studies prepared after 2011. *See generally* PW0000392-688.

the modeling projections that FWS analyzed was Representative Concentration Pathway ("RCP") 8.5. PW0000479. RCP 8.5 is generally considered the business-as-usual model and reflects the expected outcomes if little to no additional climate-change mitigation takes place. PW0000549. In that regard, RCP 8.5 is considered the "worst case scenario." *Id.* Using these modeling projections, the SSA identified how many sea-ice-free months there would be in winter, spring, and summer/fall in the years 2030, 2045, 2060, and 2100. PW000480.

The SSA also examined new information addressing the effects to the species as they increasingly rely on coastal haulouts. Regarding prey depletion, a 2012 study by Jay et al. found that 45 of 51 foraging trips by tagged walruses (mostly females) in the Chukchi Sea averaged 33 kilometers round trip and lasted 2.2 days. PW0000621. The relatively short distance that most walruses traveled for foraging suggests that prey near costal haulouts may be more abundant than previous surveys estimated. The Native Alaskan residents of the northeastern Chukchi Sea have confirmed that walrus prey is abundant in that area. PW0000407.

The study by Jay et al. also found that 6 of the 51 foraging trips made by female walruses averaged 611 kilometers round trip and 14.2 days. PW0000621. These walruses were traveling to the Hanna Shoal region, a prey hotspot. *Id.* Although FWS had believed in 2011 that male walruses traveled longer distances than females for foraging because of their physiology, this study demonstrated that female walruses are also capable of traveling great distances if they so choose. *See* PW000621; PW0000118.

Additionally, new information demonstrated "that management programs in the U.S. and Russia have been effective at reducing disturbances and haulout related mortalities in recent years." PW0000437. Therefore, disturbance and trampling events were likely to have a smaller impact on the population than what was previously found in 2011. See id.

And, even though the agency had predicted in its 2011 finding that harvest levels would "continue at levels similar to current ones" and would become unsustainable in the future, FWS found in 2017 that the annual subsistence harvest is at "historically low levels and is unlikely a significant abundance stressor at the present time." PW0000127; PW0000400; PW0000439-40. In 2014, only 2,723 walruses were harvested in the United States and Russia as compared to 4,927 walruses in 2010. PW0000439-40.

The SSA ultimately "found that environmental changes over the last several years such as sea ice loss and associated stressors are impacting [] walruses, but that other stressors that were identified in 2011 have declined in magnitude." PW0000399. The SSA also concluded that "walruses are adapted to living in a dynamic environment and have demonstrated the ability to adjust their distribution and habitat use patterns in response to recent shifting patterns of ice," although "the ability of the [] walrus population to adapt to or cope with increasing stress in the future is uncertain." PW0000400.

After reviewing the SSA, FWS's four-member listing decision team concluded that the walrus did not meet the definition of either a threatened or endangered species and therefore did not warrant listing pursuant to the ESA. PW0000819-21 (2017 12-month finding); PW000387-91 (memo to the record further explaining decision to not list the species). However, the Marine Mammal Protection Act continues to provide significant protections for walruses including: (1) prohibiting the taking of walruses, with certain limited exceptions; (2) allowing the Secretary of the Interior to prescribe regulations on subsistence harvest if the walrus stock is depleted; and (3) requiring FWS to annually analyze the status of the walrus

and, if appropriate, revise its Stock Assessment Report. 16 U.S.C. §§ 1371, 1386.

STANDARD OF REVIEW

Judicial review of FWS's decision is governed by the Administrative Procedure Act ("APA"), 5 U.S.C. § 706. The APA provides that a court may set aside final agency action only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). CBD must satisfy a "high threshold" to establish that agency action is unlawful under the arbitrary and capricious standard of review. *River Runners for Wilderness v. Martin*, 593 F.3d 1064, 1067 (9th Cir. 2010) (per curiam). Judicial review under this standard is "highly deferential, presuming the agency action to be valid and affirming the agency action if a reasonable basis exists for its decision." *Ranchers Cattlemen Action Legal Fund United Stockgrowers of Am. v. U.S. Dep't of Agric.*, 499 F.3d 1108, 1115 (9th Cir. 2007) (citation and quotations omitted). The Court must be at its "most deferential" when "the agency is making predictions, within its area of special expertise, at the frontiers of science." *Lands Council v. McNair*, 537 F.3d 981, 993 (9th Cir. 2008) (*en bane*) (citation and quotation omitted). Moreover, FWS's decision "need only be reasonable, not the best or most reasonable, decision." *River Runners*, 593 F.3d at 1070 (citation omitted).

ARGUMENT

I. The Record Demonstrates that FWS Based the 2017 Finding on New Scientific Evidence Developed After the 2011 Finding.

CBD's assertion that FWS abruptly "reversed course" from the 2011 finding without acknowledging that it was changing its position or explaining why the science in the 2011 finding was no longer valid, Memorandum in Support of Plaintiff's Motion for Summary Judgment (ECF 36) ("CBD's Brief") at 12-13, is incorrect. As a preliminary matter, the 2011 finding was not a final listing decision, and it therefore could not have been "reversed" in 2017. Rather, the 2011 warranted-but-precluded finding is properly viewed as a step in an evolving deliberative process that culminated in FWS's final decision in 2017 that listing the species was not warranted. Indeed, the ESA expressly states that a warranted-but-precluded finding "shall be treated as a petition that is resubmitted to the Secretary." 16 U.S.C. § 1533(b)(3)(C)(i); *see also id.* § 1533(b)(6)(A). FWS then has a duty to reconsider the available information anew and "make a finding as to whether the petition" warrants listing. *Id.* § 1533(b)(3)(A).

Even if FWS had made a finding in 2011 that the species warranted listing and was not precluded by other listing priorities, that finding is still not a final listing determination. The ESA requires additional steps before reaching a final listing determination, such as publishing a proposed listing rule and providing for public comment. 16 U.S.C. § 1533(b)(3)(B)(i), (5)(A)(i). The final listing determination only occurs after FWS has taken the necessary steps in the rulemaking process, and it takes the form of either (1) publication of the final rule; or (2) withdrawal of the proposed rule because FWS determines that the species is not endangered or threatened. *Id.* § 1533(b)(6)(B)(i). For these reasons, CBD's reliance on the *Federal Communications Commission v. Fox Television Stations*, 556 U.S. 502 (2009), line of cases is misplaced. CBD's Brief at 10-12. Those cases apply only when an agency changes its official policy or departs from a final regulation. *See Sierra Club v. Bureau of Land Mgmt.*, 786 F.3d 1219, 1226 (9th Cir. 2015). Here, FWS has not reversed a final policy or regulation. Rather, FWS completed the next step in the listing process.³

Moreover, even if the Court were to apply the inapt test espoused in *Fox Television*, it is apparent that FWS's decision-making process and 2017 finding complies with the APA. *See Fox Television*, 556 U.S. at 515-16 (outlining the four-part test). First, FWS displayed awareness that it was changing position. The 2017 finding acknowledges that FWS originally made a warranted-but-precluded finding in 2011 and that it was now making a finding "that listing the [] walrus as an endangered or threatened species under the Act is not warranted at this time." PW0000819; PW0000821. This makes the 2017 finding markedly different from the decision at issue in *Friends of Alaska National Wildlife Refuges v. Bernhardt*, No. 3:18-cv-000029-SLG, 2019 WL 1437596 (D. Alaska Mar. 29, 2019). In that case, the Secretary of Interior issued a decision that did "not address or acknowledge [an earlier decision] and its contrary findings." *Id.* at * 8. This Court held that the "omission suggests that the Secretary did not . . . display awareness that he was changing position." *Id.* (quotations and alterations omitted).

Second, the 2017 finding demonstrates that a different finding is permissible under the ESA. As FWS explained in its finding, it must determine whether a "petitioned action is: (1) [n]ot warranted; (2) warranted; or (3) warranted but precluded" in accordance with 16 U.S.C. § 1533(b)(3)(B). PW0000795. To determine whether listing a species is warranted, FWS analyzes whether the species meets either the definition of an endangered or threatened species

³ Although the Ninth Circuit has applied the test from *Fox Television* for when "an agency changes a policy based on factual findings that contradict those on which the prior policy was based" to a 12-month finding, the Court was not presented with Defendants' statutory arguments. *See CBD v. Zinke*, 900 F.3d 1053, 1067-68 (9th Cir. 2018); Federal Defendants-Appellees' Answering Brief for *CBD v. Zinke*, 900 F.3d 1053. Therefore, the Ninth Circuit has not ruled on this particular issue.

using the best available science. 16 U.S.C. § 1533(a)(1), (b). Here, FWS made a decision that listing the walrus is not warranted—one of the three options prescribed in the ESA—based on "the best available information." PW0000819-21.

Third, FWS believes that the 2017 finding is "better" than the 2011 one because it utilized the most up-to-date scientific and commercial information. Indeed, the Service was required to base its decision on the "best scientific and commercial data available" at the time of the listing decision, and to change its determination if newer and better data led to a changed outcome. *See* 16 U.S.C. § 1533(b)(1)(A). And, when an agency adopts a new policy, courts "assume" it is because the agency believes the new policy is better. *Organized Village of Kake v.* U.S. Dep't of Agric., 794 F.3d 956, 967 (9th Cir. 2015).

Finally, FWS has provided "good reasons" for its not-warranted finding and included a "reasoned explanation [] for disregarding facts and circumstances that underlay or were engendered by the prior policy." *Fox Television*, 555 U.S. at 516. Namely, that more recent scientific information had invalidated many of the assumptions that FWS had made in its 2011 finding about stressors that it had thought were "threats" to the species.

As explained above, the SSA (which was incorporated into the 2017 finding by reference and contains "detailed discussion of the basis for th[e] finding"), examined the very stressors that led FWS to conclude that the species warranted listing in 2011: dependence on coastal haulouts and localized prey depletion, increased energetic costs to obtain prey, disturbance and trampling at haulouts, and subsistence harvest. *See supra* Factual Background Sections II-III; PW0000391; PW0000821. However, the SSA and 2017 finding incorporated information that became available after FWS issued the 2011 finding. *See id.*; *see generally*

PW0000392-688. Recent information on each of these stressors suggested that prey was not depleted near coastal haulouts, female walruses could travel greater distances to forage for prey, disturbance and trampling events had declined, and subsistence harvest levels had not remained static as anticipated, but rather declined. *See supra* Factual Background Section III. This information, and the potential for walruses to adapt to the loss of sea ice, led FWS to determine "that environmental changes over the last several years such as sea ice loss and associated stressors are impacting [] walruses, but that other stressors that were identified in 2011 have declined in magnitude." PW000399; *see also* PW0000400 ("While declining sea ice habitat is likely to negatively affect the [] walrus population, other stressors that are likely to have a population-level effect have diminished since the original 2011 finding.").

FWS's decision to utilize the most current information in its listing determination is a "reasoned explanation" for re-evaluating the outdated assumptions it made in its 2011 finding and reaching a different conclusion. Consequently, if FWS's 2017 finding must meet the *Fox Television* test, it is lawful agency action under the APA and should be upheld.

II. FWS's Determination that the Foreseeable Future is 2060 is Reasonable and Supported by the Record.

CBD argues that FWS should have identified 2100 as the foreseeable future because the scientific community is confident regarding the data out to 2100 on the lone significant threat to the species—loss of sea ice. CBD's Brief at 16. However, the ESA does not simply ask how long an identified threat is foreseeable; rather, under the ESA, Congress requires FWS to determine whether the species 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). *See* PW0000796 (FWS "must look beyond the mere exposure of the species to the stressor to determine whether the species responds to the stressor in a way that causes actual [negative] impacts to the species."). In other words, FWS must predict with some degree of confidence the *status* of the species within the "foreseeable future."

Here, FWS reasonably determined, based on the SSA Science Team's assessment of the best available science, that it could predict the species' response to sea-ice loss with confidence only to 2060, not 2100. FWS's foreseeability analysis was "responsive to new, reliable research while accounting for species-, threat-, and habitat-specific factors," an approach that is "consistent with the ESA's mandate" and Ninth Circuit case law. *Alaska Oil* & Gas Ass'n ("AOGA") v. Pritzker, 840 F.3d 671, 682 (9th Cir. 2016).

A. FWS Reasonably Defined the Foreseeable Future Based on the Best Available Science on the Walruses' Response to the Loss of Sea Ice.

CBD's primary argument is that the foreseeable future should be based solely on the foreseeability of the threat without any consideration of what the best available science says about the walruses' response to the threat. CBD's Brief at 17. This approach is inconsistent with the plain language of the ESA, which requires FWS to assess the foreseeability of the *species' status* not just the foreseeability of the threat.

"Neither the ESA nor the applicable regulations define the term 'foreseeable future.' As such, the statute is ambiguous and the court must defer to FWS's interpretation unless the interpretation is unreasonable." *Western Watersheds Project v. Ashe*, 948 F. Supp. 2d 1166, 1177 (D. Idaho 2013). In 2009, the Department of the Interior issued guidance to FWS on interpreting the term "foreseeable future," which recommends that FWS determine the foreseeable future timeframe on a case-by-case basis using its expert judgment. 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) ("M-Opinion"). As the Ninth Circuit explained, the M-Opinion provides that 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." AOGA, 840 F.3d at 682 (emphasis added). In other words, contrary to CBD's arguments, there are two components of the foreseeable-future analysis: (1) the foreseeability of the threat; and (2) the foreseeability of the response of the species to the threat. See M-Opinion at 10. The time parameters for these two components are not always the same, as is the case here. See PW0000476 (Science Team noting that "[s]tressors acting on a species and the species response to those stressors are not, in general, equally predictable.").

As the 2017 finding explains, FWS considered how far into the future it could reliably predict the extent to which threats might affect the species' status, "recognizing that its ability to make reliable predictions into the future is limited by the variable quantity and quality of the available data about impacts to the [] walrus and the response of the [] walrus to those impacts." PW0000820. FWS does not dispute that the best available science on sea-ice loss allows FWS to foresee the threat out to 2100. Thus, the Science Team and FWS considered data on sea-ice loss at various time frames, including 2100. *See* PW0000821 ("[W]hile we included projections out to 2100 in our analysis, we considered 2060 as the foreseeable future timeframe for this analysis."). However, the Science Team determined that, based on the best available science, described in Subsection B below, it lacked confidence in the assessment of the species' response to the threat beyond 2060. *See* PW0000820 ("While we have high certainty that sea-ice availability will decline as a result of climate change, we have less certainty,

particularly further into the future, about the magnitude of effect that climate change will have on the full suite of environmental conditions (*e.g.*, benthic productivity) or how the species will respond to those changes.").

Absent from CBD's foreseeable-future argument is any mention of, let alone challenge to, the assessment of the best available science on the foreseeability of the walruses' response to sea-ice loss. FWS's determination that the foreseeable future is 2060 is reasonable, based on the best available science as reviewed by the Science Team in the SSA report, and is entitled to deference. *See Trout Unlimited v. Lohn*, 559 F.3d 946, 959 (9th Cir. 2009).

B. FWS's Species-Specific Assessment of the Foreseeable Future is Reasonable and Based on the Latest Data on the Walruses' Response to the Loss of Sea Ice.

Based on the Science Team's assessment of the best available science, FWS determined that the foreseeable future timeframe for the walrus is 2060. PW0000820. The SSA report shows that the Science Team considered data regarding the sea-ice loss at different time intervals including 2015, 2030, 2045, 2060 and 2100. PW0000476. All timeframes except 2100 were based on the walruses' 15-year generation length. *Id.; see also* M-Opinion at 15 (noting that it is appropriate to use generation length data in combination with other relevant information concerning population status, trends, and threats when identifying the foreseeable future). However, when the Science Team had to make predictions regarding the walruses' response to sea-ice loss, the experts determined that, due to data that became available after the 2011 finding on walrus behavior and the historically low levels of subsistence harvest—the only other stressor identified as a threat in the 2011 finding—they were no longer confident about how the species would respond to sea-ice loss as far out as 2100. *See*

PW0000399-400.

CBD argues that, because the National Marine Fisheries ("NMFS") and FWS determined in other listing rules involving sea ice-dependent species that the foreseeable future is 2100, FWS must conclude that the foreseeable future for the walrus is 2100. CBD's Brief at 18. CBD relies on the listing decisions for the bearded seal and ringed seal as well as the 2011 warranted finding for the walrus that is based on now-outdated information. Id. at 18-19. However, NMFS's and FWS's prior decisions are not binding precedent on the agency. In fact, ignoring species-specific information and newly available science would be contrary to both the plain language of the ESA and Ninth Circuit precedent. See 16 U.S.C. § 1533(b)(1)(A); AOGA, 840 F.3d at 681 (9th Cir. 2016) (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); CBD v. Lubchenco, 758 F. Supp. 2d 945, 967 (N.D. Cal. 2010) (noting that "the length of time that constitutes the 'foreseeable future' for listing purposes may vary depending on the species and the threats it faces"); see also AOGA v. Pritzker, No. 14-cv-0029, ECF 63 at 11-12 (Defendant-Intervenor CBD stating that "courts have made perfectly clear that 'the definition of foreseeable future is to be made on a species-by-species basis and through an analysis of the time frames applicable to the particular species at issue"").

Moreover, CBD ignores the newly available information mentioned in the 2017 finding and discussed in detail in the SSA that demonstrates that the walrus may be more able to adapt to a loss of sea ice than FWS previously believed, thus calling into question previous assumptions about the foreseeability of the species' response to sea-ice loss. See PW0000820. ("[W]hile it is likely that the increased use of land will have some negative effects on the population, the magnitude of effect is uncertain given the demonstrated ability of [] walruses to change their behavior or adapt to greater use of land."). Since the 2011 finding, studies have shown that the "spring migration occurs earlier in the year and females and young have shifted their summer distribution northward.... In September, females and young now utilize coastal haulouts more often in the Chukchi Sea and fall migration occurs later in the year." PW0000421 (citing studies from 2012 and 2016). The Science Team also noted that "[c]onsistent summer/fall use of coastal haulouts by females and juveniles has only occurred since 2007 in the U.S. and the long-term consequences of this behavior are unknown. However, female and juvenile Atlantic walruses appear to have successfully used coastal haulouts over the last several years in Svalbard, Norway." Id. The SSA report also notes that, while in the past disturbance events at coastal haulouts had resulted in thousands of walrus mortalities, data from 2016 showed a decline in such mortalities "likely due to management actions" that have been taken more recently. PW0000422; see also PW0000436-437. As the 2017 finding explained, "[t]hese observations mirror those of Alaskan Native hunters, who assert that the population is large and stable, that [] walruses are intelligent, adaptable, and able to make the necessary adjustments needed to persist." PW0000470; PW0000820.

Thus, in a relatively short period of time, walruses have adapted some behaviors to the changing sea-ice conditions. The 2017 finding also explains that "few malnourished or diseased animals are observed, and reproduction is higher than in the 1970s-1980s, when the population was thought to have reached its carrying capacity and subsequently declined.

Consequently, the current prey base of [] walruses appears adequate to meet the energetic and physiological demands of the population. Survival rates are higher than in the 1970s-1980s, and harvest levels have also decreased." PW0000820. In contrast, no such data was available on the bearded or ringed seals at the time NMFS prepared the warranted findings or on the walrus when FWS prepared the 2011 finding. Because there was different data available to FWS when it prepared the 2017 finding than what was available for the findings on which CBD relies, it is unsurprising that FWS came to a different, but nonetheless rational, conclusion regarding the foreseeability of the walruses' response to the threat.

C. Relying on the Science Team's Expert Assessment of the Best Available Science, FWS Reasonably Concluded that Predictions Regarding the Walruses' Response to Sea-Ice Loss are Reliable only until 2060.

Underlying CBD's foreseeable-future arguments is its position that the ESA requires FWS to interpret any scientific uncertainty in favor of listing a species. CBD's Brief at 20-24. To the contrary, to list a species as a "threatened species," Congress requires FWS to determine that the species is "*likely* to become an endangered species within the foreseeable future." 16 U.S.C. § 1532(20) (emphasis added). FWS interprets the term "likely" to have its common meaning (*i.e.*, more likely than not). *See In re Polar Bear*, 709 F.3d 1, 14-25 (D.C. Cir. 2013); *see also AOGA*, 840 F.3d at 684 (noting that "likely" means that "an event, fact, or outcome is probable"). Any assessment of a species' response to a threat in the future will necessarily involve some scientific uncertainty. If scientific uncertainty were enough to require ESA listing, every species facing any sort of threat in the future would have to be listed as a "threatened" species. Instead, Congress left it to FWS to use its expert judgment to determine whether it is more likely than not that the species will become an endangered species based

on an assessment of the foreseeability of the species' response to particular threats.

As discussed above, the SSA and 2017 finding describe the newly available information, which led the Science Team to conclude that it could not make reliable predictions regarding the species' response beyond 2060. As the Science Team explained:

Observations of [] walrus's responses to the effects of climate change from 2007 (the first summer/fall that ice receded beyond the continental shelf) to the present are likely the most realistic information when evaluating the future. However, even these observed responses have changed as [] walruses have adapted their behaviors (e.g., migration patterns, coastal haulout locations, and feeding patterns within that period which is less than one generation). In addition, it is likely that further changes in [] walrus behaviors will occur as they refine responses, as stressors intensify, or new stressors emerge.

PW0000476. Given the dynamics of the species and its evolving response to sea-ice loss, the Science Team determined that it was not scientifically sound to predict the species' response to the threat beyond three generations, or 2060. *See id.* (discussing "Time Frame").

Ignoring the Science Team's assessment of the new data, CBD cites two inapposite cases to argue that FWS cannot consider scientific uncertainty to come to a not-warranted finding. CBD's Brief at 21-23. Although both cases refer to some form of "scientific uncertainty," neither involves a species that has shown some ability to adapt in a way that could potentially lessen the effects of the identified threat on the species. In the case of the Arctic grayling, the Ninth Circuit determined that FWS had failed to make any predictions regarding the effects of climate change when considering the effects of low stream flows and high water temperatures because of uncertainty. *CBD v. Zinke*, 900 F.3d 1053, 1072 (9th Cir. 2018). In contrast, here FWS and the Science Team provided detailed projections regarding the species' response to the effects of climate change—namely, sea-ice loss—on the walrus over a timeframe of three generations. The team of experts merely determined that it could

not extend those projections out as far as CBD would like. In the case of the Pacific fisher, FWS had information that showed that one of the threats—mortality due to rodenticide poisoning—was worse than previously thought. *CBD v. FWS*, 342 F. Supp. 3d 968, 974 (N.D. Cal. 2018). In fact, the study observed a "notable increase in toxicosis, meaning direct death by poisoning of Pacific fishers." *Id.* Nevertheless, the district court concluded that FWS had dismissed the data because the agency was uncertain as to the level of toxicant exposure at which fishers may experience adverse impacts. In contrast, here the sea-ice conditions have worsened since 2011, but in this short time the species has already modified behavior to adjust to sea-ice loss while at the same time reductions in subsistence harvest have occurred to such an extent that subsistence activities are no longer considered a significant threat. In sum, beyond mention of "scientific uncertainty," the cases cited by CBD have little in common with the facts of this case and should be dismissed.

CBD also incorrectly argues that, because FWS and the Science Team concluded that the best available science did not allow for reliable predictions beyond 2060, they must not have relied on the best available science. CBD's Brief at 21. Contrary to CBD's assertions, FWS did not conclude that listing was not warranted because more studies are needed on the species' response to sea-ice loss. *Id.* Instead, FWS concluded that the walrus has demonstrated in a very short period of time an ability to adapt to some degree to the changing sea-ice conditions. This potential ability to adapt to new conditions calls into question the presumptions made by FWS in the 2011 finding. FWS candidly stated that these adaptive behaviors may or may not be enough to maintain the walruses' current status. *See* PW0000820. However, the reduction in subsistence harvesting combined with the newly discovered adaptive behaviors resulted in the Science Team and FWS's rational conclusion that predictions regarding this adaptive species' response to an evolving threat could not reasonably be made beyond three generations or 2060. *See id.* The SSA and finding reflect a rational assessment of complex scientific data that is entitled to deference. *See AOGA*, 840 F.3d at 679.

III. CBD's Remaining Arguments Mischaracterize the Basis for the 2017 Finding and Lack Support in the Record and Law.

The remainder of CBD's brief argues mainly that the 2017 finding relies on two "unfounded conclusions": (1) that the "walrus could adapt" to projected sea-ice change and (2) that the size of the walrus population currently appears to be approaching stability. CBD's Brief at 25-29, 31. These arguments mischaracterize the 2017 finding, particularly as to FWS's determination that the walrus did not qualify as a threatened species within the meaning of the ESA. And contrary to CBD's related arguments, FWS did not err in depicting and examining projected changes in sea-ice and land-based habitat, arbitrarily ignore the purported threat of coastal erosion, or unlawfully treat "uncertain" scientific information inconsistently.

A. FWS Reasonably Found It Could Not Make Reliable Predictions About Walrus Behavior Beyond 2060.

Contrary to CBD's argument that FWS found or assumed that "walruses could adapt," CBD's Brief at 26, as explained in detail above, FWS in fact determined that it could not make reliable predictions regarding how walrus behavior might change in response to sea-ice change beyond 2060. Based on that determination, FWS could not conclude that the walrus population likely would decline from its current, healthy and non-endangered state to the point of becoming in danger of extinction in the foreseeable future, as the ESA requires for listing a threatened species. PW0000820-21. These findings are supported by the record and rational. First, as noted above, FWS found that the walrus population appeared to be healthy with "few malnourished or diseased animals," had a sufficient prey base "adequate to meet [its] energetic and physiological demands," and was "not being negatively impacted in a significant way at this time" by climate change and other stressors. PW0000821; *see also* PW0000399, PW0000418, PW0000465-66 ("[i]ndices of population status ([the ratios between calves and cows], [differences in tusk size], and bone cortisol levels) suggest the population is demographically and physiologically resilient to the current levels of sea ice loss"). After a decline in the 1980s when the population likely exceeded the capacity of the environment, FWS found that population appears to have stabilized in "the current time period." PW0000399. In other words, the walrus was not currently in danger of extinction despite several decades of sea-ice loss, and CBD makes no claim that it is.

As to whether the walrus was likely to decline from its current state to become in danger of extinction in the foreseeable future, *i.e.*, a threatened species, FWS found that "while the [] walrus will experience a future reduction in availability of sea ice, resulting in reduced resiliency and redundancy, we are unable to reliably predict the magnitude of the effect and the behavioral response of the [] walrus to this change." PW0000821. FWS explained that while the walrus prefers sea ice, it is not ice dependent and uses land habitat, including as a base from which to forage. PW0000820. FWS also noted that under all climate-change scenarios analyzed, the species would have sufficient sea ice for breeding and birthing through the foreseeable future of 2060. *Id.* Although some population-level impacts were expected in the future as the species' preferred sea-ice habitat declined, FWS did not have "reliable information showing that the magnitude of this change could be sufficient to put the subspecies in danger of extinction in the foreseeable future," let alone that this outcome was likely, as required for a threatened listing. PW0000821; PW0000400.

As CBD alludes to, FWS did cite evidence of the walruses' adaptability to climate change, but only as support for FWS's finding that it could not reliably predict how well the species would adapt to the poorer summer sea-ice conditions projected out to century end and thus whether a large enough population decline was likely to occur that put the species in danger of extinction. PW0000820 ("while it is likely that the increased use of land habitat will have some negative effects on the population, the magnitude of effect is uncertain given the demonstrated ability of [] walruses to change their behavior or adapt to greater use of land"); PW0000400 ("increasing abundance stressors will negatively affect the population," but given walruses' ability to "adjust their distribution and habitat use patterns in response to recent shifting patterns of sea ice," "the magnitude of the decline is unknown"); PW0000388. As discussed above, the scientific evidence indicates that the walrus is an intelligent and adaptable species that has "recently altered [its] behavior in response to sea ice dynamics" and increased its use of coastal, land-based haulouts in response to climate change. PW0000420-22; see also PW0000465; PW0000388. It was therefore entirely rational for FWS to find that it could not reliably predict whether the walrus would be so unadaptable that it was likely to become in danger of extinction within the foreseeable future.

But adaptability is not all that FWS relied upon. FWS asked the Science Team about the likelihood of various levels of future stressors on the walrus for time periods out to century end, which were then aggregated using a Bayesian Belief Network ("BBN") model. PW0000544. This exercise revealed major differences of opinion and substantial uncertainty among the Team regarding the likely impacts of summer sea-ice loss on the walrus beyond 2060. *See, e.g.*, PW0000575-78 (noting the lack of confidence in predictions beyond 2060 and the differences among the experts' views regarding the likelihood and intensity of future stressors beyond 2060); PW0000570 (noting the divergent expert views on future population change and stating that "[t]he ability of the [] walrus population to adapt to or cope with increasing stressor levels in the future is a topic of great uncertainty"); PW0000388. Based on this uncertainty among experts, FWS reasonably found that it could not reliably predict that the walrus was "likely" to decline to the point of being a "threatened" species.

While wrongly accusing FWS of assuming that the walrus will adapt, in truth it is CBD that assumes that the walrus "will not be able to adapt" to future sea-ice loss. CBD's Brief at 2, 26. CBD speculates that increased use of land-based haulouts will increase trampling mortality and that walruses will not distribute to a larger number of coastal haulouts as sea-ice declines. *Id.* at 26-28. But as the SSA notes, there was substantial disagreement among walrus experts on the Science Team on this issue. *See* PW000576 ("walruses may or may not be able to adapt to increased walrus density and crowding at haul-out sites and distribute themselves more evenly across a larger number of sites, thereby reducing the risk of trampling and disease"). CBD also ignores that improved human management of coastal haulouts has resulted in reduced mortalities at land-based haulouts. PW0000437.

For each potential stressor on the walrus, CBD asks FWS to assume the worst, notwithstanding contrary evidence and the substantial uncertainty surrounding these issues. CBD cites the 2011 finding for the proposition that increased use of coastal haulouts farther from prey "will lead" to increased energetic costs affecting reproduction and causing a population decline. CBD's Brief at 27. But a 2012 study shows that female walruses can and do travel significant distances to forage over multi-day trips, including over 200 km one way from land-based haulouts. PW0000621; PW0019012. In addition, the average round-trip foraging distance of 33 km from land-based haulouts found by this study indicated that prey is more abundant near land-based habitat than previously thought, a point also made by Point Lay villagers. PW0019012; PW0000407. This new data on walrus foraging reasonably gave FWS pause and prevented it from assuming that land-based habitat would be insufficient for foraging in summer and fall as the ice-free season increased.

With respect to reproduction, CBD argues that "walruses have never been observed breeding from coastal haulouts or giving birth in the water or on land." CBD's Brief at 26. But the Science Team was not willing to speculate that land-based breeding and birthing could not occur under ice-free conditions. "Because walruses actually breed in the water adjacent to areas where they've congregated on ice, the [Science Team] agreed that likelihood is low that the environment, under ice-free conditions, would be inadequate to support breeding needs." PW0000561. But at a minimum, given the current lack of ice-free conditions during the breeding season, there is "a high degree of uncertainty about to what degree walrus require, prefer, or use ice because it exists, for breeding." PW0000599. In addition, "[a]lthough birthing habitat in spring will be more limited (-13% by 2060 and -36% by 2100), most birthing events occur early enough in the spring (May) to avoid ice-free conditions or inadequate levels of sea ice availability." PW0000639. The dominant view among the Team was that a decline in the birthing environment would occur, but again given the "lack of data" on this issue, the BBN exercise "did not assume a threshold or tipping point beyond which a reduction in sea ice would become potentially catastrophic for walruses." PW0000577.4

In sum, FWS fully analyzed potential impacts of sea-ice loss on the walrus out to 2100, but the Science Team "expressed low confidence" in the estimates of stressors out to that timeframe because of a "collective uncertainty about the validity of the assumptions" regarding the response of walruses to sea-ice conditions at century end. PW0000578. CBD argues that "FWS 'must explain why uncertainty justifies its conclusion." CBD's Brief at 29 (citations omitted). FWS did that here, explaining that very substantial uncertainty existed regarding how the species would respond to sea-ice change beyond 2060. FWS rationally found that such a high level of uncertainty prevented it from reliably predicting whether the walrus was likely to experience a decline sufficient to become in danger of extinction in the foreseeable future.

B. FWS Did Not Improperly Rely on "Inconclusive" Current Population Size or Trend Data.

In another mischaracterization of the 2017 finding, CBD argues that FWS relied on inconclusive evidence of the walruses' population trend to not list the species as endangered or threatened. CBD's Brief at 31-33. CBD posits that certain models indicate that it is "equally plausible" that the walrus population is still in decline, and that "[i]f the science on population size and trends is undeveloped and unclear, the [FWS] cannot reasonably infer that the absence of evidence of population decline equates to evidence of persistence." *Id.* at 31-32. But FWS

⁴ Contrary to CBD's argument, CBD's Brief at 28, n.5, FWS did not "ignore" Ray et al. 2016 and cited it at multiple locations in the SSA. PW0000421, PW0000465, PW0000536. And while FWS fully acknowledged the paper's conclusion that increased fragmentation of sea ice could increase "dispersal mortality," FWS noted that such dispersal also would likely increase redundancy of breeding walruses, given that FWS assesses redundancy, *i.e.*, the ability of a species to withstand catastrophic events at particular locations, "based on the spatial extent of the population in different seasons." PW0000421, PW0000465.

did not rely on the modelled population estimates or trend to infer that the walrus population would not decline or would persist into the future, as CBD argues.

First, FWS acknowledged that current population estimates had "low precision" and "should be interpreted with extreme caution." PW0000820. Unsurprisingly on these facts, there is no reference to any of the modelled population estimates in the portions of the 2017 finding analyzing whether the walrus qualified as an endangered or threatened species. PW0000820-31. In the 2017 finding, FWS did appropriately cite other, indirect evidence of current population size and status in assessing whether the species was *currently* in danger of extinction, *i.e.*, endangered. PW0000820 (discussing the apparent current resiliency of the population "to cope with the changing environments of the last decade," noting the current observations of Alaska Native hunters that the population appears "large and stable," and finding that the population does not appear to be "negatively impacted in a significant way at this time"); *see also* PW000417-420 (summarizing the various indicia indicating stabilizing or improving population health since the 2000s).

But more importantly, given the lack of any claim by CBD that the walrus is currently endangered, once the 2017 finding turns to the much bigger and more forward-looking question of whether the species is likely to become in danger of extinction in the foreseeable future, *i.e.*, a threatened species, there is no reliance by FWS on past or current population estimates or trends to find that the population will remain stable or "persist" as CBD claims. PW0000820-21 (starting with the first full paragraph of second column). In fact, in analyzing the threatened question, FWS found that some negative impacts and population decline (reduced redundancy and resiliency) were expected with the walruses' increased use of land habitat; however, "the magnitude of the effect is uncertain" such that FWS could not reliably predict a future decline to the point of the walrus becoming in danger of extinction. *Id.; see also* PW0000390 (acknowledging that future sea-ice loss would have negative consequence for survival and recruitment logically including "a reduction in the overall population size"). In short, CBD is simply wrong that FWS relied upon the estimates of recent population size and trends as "evidence of persistence." But to the extent that FWS considered the recent population estimates, doing so was lawful. Under the ESA's best-available-science standard, FWS may consider and rely on "inconclusive" data. *Defenders of Wildlife v. Babbitt*, 958 F. Supp. 670, 680 (D.D.C. 1997) (best available science standard does not require "conclusive evidence," only that agency use best science available and not ignore contrary evidence).⁵

In addition, CBD's argument greatly overstates the findings of Taylor et al., 2017 regarding population estimates. Its authors state that "[t]hese models suggest that the population [had declined], but that the rate of decline began moderating in the 1990s and that the population growth rate either continued to increase from 1999 to 2015... or stabilize at a lesser level of decline than that seen in the 1980s." PW0020865. When viewed in combination with the other indicia of population size and status discussed above, FWS reasonably found that the walrus population appears to have halted its past decline and

⁵ CBD cites *National Wildlife Federation v. NMFS*, 184 F. Supp. 3d 861, 928 (D. Or. 2016), for the proposition that FWS could not draw any conclusions from the recent modelled population estimates given their wide confidence interval of 93,000 to 478,975 individuals. CBD's Brief at 32. But such confidence intervals are not atypical in estimating the size of this population, *e.g.*, an aerial survey conducted in 2006 estimated total abundance as 129,000 with a confidence interval of 55,000 to 507,000. In addition, in *National Wildlife Federation*, NMFS had relied to a much larger degree on the data in question, whereas here FWS considered not just the recent modelled population estimates but "all of the demographic and population status information collectively." PW0000419.

stabilized in the more recent period, which supports FWS's finding that the walrus is not currently endangered. PW000417-420. At the same time, FWS did not rest its decision that listing the species as threatened is not warranted based on the population's apparent current stability, as CBD falsely portrays.

C. FWS Did Not Arbitrarily "Dismiss" Subsistence Hunting.

CBD also wrongly asserts that FWS arbitrarily concluded that subsistence hunting "was no longer a threat to [] walruses." CBD's Brief at 33. In fact, FWS continued to identify "[h]arvest" as one of the "additional stressors" that could have population-level effects on the walrus and fully analyzed it as such. PW0000820; PW0000437-441. However, FWS found that this threat had diminished significantly since the 2011 finding. For the 2011 finding, FWS found that the average harvest over the most recent period for which data was then available (2000-2008) was 5,285 walrus per year. PW0010572. FWS further predicted the amount of harvest "was not expected to change appreciably in the future." PW0010577; *see also* PW000495 (in 2011, FWS "assumed that total harvest levels would remain the same as observed at that time"). This prediction proved to be wrong. Harvest in fact declined by over 50% from the 5,285 average of 2000-2008 to about 2,723 in 2014. PW0000439-40.

Faced with this decline in mortality from harvest, CBD argues that hunting at coastal haulouts increases the chances of stampede-caused injury or mortality. But even as FWS noted in 2011, "[a]wareness of the sensitivity of walruses to disturbance events at coastal haulouts is growing, and the prospects for developing local conservation and management initiatives to address disturbance related mortalities along the Arctic coast appears to be good." PW0010576-77. In 2008, the Eskimo Walrus Commission passed a resolution discouraging

hunting at coastal haulouts along the Chukchi Sea. PW0000435. In Russia, hunters have revived a traditional practice of hunting at coastal haulouts with spears rather than rifles to minimize disturbances. PW0010577. Some communities have also appointed a steward that directs hunting activity to minimize impacts and disturbances at coastal haulouts. *Id.* These efforts have paid off, as reduced mortalities have occurred at land-based haulouts. PW0000437. Sea-ice loss also may limit harvest as communities are unable to practice traditional methods that rely on sea ice. PW0000439-40. FWS's assessment of the reduced threat from harvest is rational and consistent with the record.

D. FWS Did Not Treat all Habitat as Equal or Disregard a Threat from Coastal Erosion.

CBD again mischaracterizes FWS's analysis in claiming that it "irrationally treated all potential habitat as equal and ignored threats from coastal erosion." CBD's Brief at 25, 29. Specifically, CBD asserts that the BBN model used by FWS to aggregate expert opinion arbitrarily fails to distinguish between land and sea-ice habitat because FWS stated that it "defined potential habitat to be marine water, sea ice, or land" and "admitted that potential habitat 'does not equate to suitable habitat, nor does it take habitat quality into account."" CBD's Brief at 29-30 (citing PW000483). CBD's argument mistakenly relies on statements in the SSA that are not even about the BBN model; rather they are describing how habitat was projected for FWS's separate spatial habitat analysis. PW000479-87; *see id.* at PW000398, PW0000616 (showing that the BBN model and habitat analysis are separate appendices).

In any event, CBD ignores that FWS's spatial habitat analysis provides projections for both sea-ice and land-based habitat *separately and in combination*. PW000485; PW000486 (showing percent change in "total potential habitat" and for "ice-accessible habit only"). CBD cites the opinion of one peer reviewer that FWS should have removed the presentation of the combined, total habitat projections. CBD's Brief at 30; PW00029846, PW00029736 (citing comments of blind reviewer suggesting that FWS "present all results separately" and "exclude all results of them being pooled together"). But FWS did not act unlawfully in merely presenting additional combined habitat projections. FWS also clearly analyzed the separate sea-ice and land-based habitat projections, contrary to CBD's misleading claim. *See, e.g.,* PW000483 (noting that "ice-accessible habitat will decrease in all seasons, scenarios, [and climate-change models]"); PW000487-89 (discussing the implications of reduced sea-ice habitat); PW0000820 (stating that walruses will experience an "increased use of land habitat," discussing how ice-based habitat could affect reproduction and foraging, but determining that FWS cannot reliably predict how the walrus will respond to these changes after 2060).⁶

As to coastal erosion, CBD points to no evidence that it presents any threat to the walrus. An agency action would be arbitrary and capricious if the agency "entirely failed to consider an *important* aspect of the problem." *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (emphasis added). CBD does not make that showing. It argues that "coastal erosion rates in the Arctic are among the highest in the world" and speculates that such erosion will lead to the "loss of land available to the walrus for hauling

⁶ CBD also argues that peer reviewers found fault with FWS's habitat analysis for not accounting for differences in habitat quality between sites. CBD's Brief at 30 (citing PW0029520, PW00029504). But apart from showing the sea-ice and land-based habitat projections separately, FWS had no way of doing so. As FWS explained, although sea-ice habitat is preferred by walrus, FWS was "unable to quantify the level of preference under varying sea ice conditions and across seasons." PW0000483. As noted above, the ESA requires consideration of the best "available" science, and CBD points to no available habitat analysis ignored by FWS that quantifies or considers differences in habitat quality between sites.

out." CBD's Brief at 30-31. But CBD does not identify any evidence that erosion and sea-level rise will do anything more than just move the coastline and the location of land-based habitat. In fact, CBD's comments to FWS for the 2017 finding do not even identify coastal erosion or the loss of habitat from sea-level rise as a threat to walrus. PW0000231-258; PW0000727-732. CBD fails to establish that FWS arbitrarily failed to consider coastal erosion.

E. Contrary to CBD's Argument, FWS was Not Required to Treat all "Uncertain" Information the Same.

While FWS reasonably found it could no longer predict that subsistence harvest would continue at the much higher levels wrongly predicted for the 2011 finding, FWS recognized that there was some uncertainty regarding future harvest levels. PW000495. Similarly, FWS acknowledged that the available population estimates had low precision. PW0000820. CBD seizes upon these frank acknowledgments as supposed proof that FWS "treated scientific uncertainty differently depending on whether that uncertainty supported its decision not to list the walrus." CBD's Brief at 33. CBD complains that FWS inconsistently relied on the population estimates and information regarding harvest levels despite their "uncertainty," while declining to find listing the species warranted given the uncertainty about how the species would respond to sea-ice loss beyond 2060. *Id.* As explained above, FWS did not rely on the modelled population estimates in isolation or in any way that is significant here, let alone as purported "evidence of persistence" of the walrus population as CBD claims.

But more fundamentally, all scientific information has some level of uncertainty. Nothing in the case law requires FWS to treat all "uncertain" information the same, or prevents FWS from relying on uncertain information where it is the best available. CBD cites *National Wildlife Federation*, 184 F. Supp. 3d at 928, as purported support for its argument, but as CBD itself acknowledges, there the Court found only that an agency "may not, *without an adequate explanation*, prefer[] uncertain favorable model results and reject[] other equally uncertain model results tending to undermine [the agency's] conclusion." *Id.* at 928 (emphasis added). Here, as discussed above, FWS explained how substantial uncertainty surrounding the walruses' response to the sea-ice conditions beyond 2060 prevented FWS from making reliable predictions about future walrus behavior and thus could not find the species would likely decline to the point of becoming in danger of extinction in the foreseeable future.

Nor did FWS improperly make judgments regarding future subsistence harvest or the current status of the walrus population based on the best available data regarding those issues. *Defenders of Wildlife*, 958 F. Supp. at 680 (FWS may rely on inconclusive evidence). As explained above, FWS rationally found that the available indicia of current population status and health collectively did not suggest that the walrus was currently endangered or being negatively affected in a significant way by sea-ice decline at present—which CBD does not dispute. Based on the record before it, FWS also reasonably declined to project that harvest would continue into the future at the much higher levels it had incorrectly predicted for the 2011 finding. CBD suggests that some kind of black and white treatment of "uncertain information" is required, under which all information with some uncertainty attached must either be wholly dismissed or accepted as fact. Nothing in the case law or standard of review requires that. FWS properly considered all of the available scientific data and reached rational conclusions.

CONCLUSION

For all of the above reasons, FWS's decision to not list the walrus under the ESA is lawful and must be upheld.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on April 16, 2019, a true and correct copy of the above document was electronically filed with the Clerk of Court using CM/ECF. Copies of the document will be served upon interested counsel via the Notices of Electronic Filing that are generated by CM/ECF.

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