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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA

CENTER FOR BIOLOGICAL DIVERSITY,

Plaintiff,

v.

RYAN ZINKE, in his official capacity as Secretary, U.S. Department of the Interior; JAMES KURTH, in his official capacity as Acting Director, U.S. Fish and Wildlife Service; U.S. FISH AND WILDLIFE SERVICE,

Defendants.

Case No. _____

COMPLAINT FOR DELCARATORY AND INJUNCTIVE RELIEF
(16 U.S.C. § 1533; 5 U.S.C. §§ 701-706)

INTRODUCTION

1. In this case, Plaintiff Center for Biological Diversity ("the Center") challenges the decision of the U.S. Fish and Wildlife Service ("Service") that the Pacific walrus does not warrant listing as a threatened or endangered species under the Endangered Species Act ("ESA"). 16 U.S.C. §§ 1531-1544; 82 Fed. Reg. 46,618 (Oct. 5, 2017) ("Listing Decision"). The Service's Listing Decision deprives the walrus of the ESA protections which it is both entitled to and desperately needs.

2. Pacific walruses, known for their massive size and ever-growing pair of tusks, depend on Arctic sea ice for their essential life functions. Pacific walruses need sea ice for courtship, giving birth, nursing their young, and resting during foraging and molting.

3. The best available science shows that climate change is destroying the sea ice the species needs to survive. There is no legitimate scientific debate that temperatures will continue to rise over the remainder of the century and that the effects of this warming will be especially acute in the Arctic. The current scientific consensus is that Arctic sea ice will continue to recede to the point where it is virtually non-existent in summer and fall by mid-century, and greatly diminished in winter and spring throughout the Pacific walrus's range by 2100 under a business-as-usual greenhouse gas scenario.

4. The best available science also shows that such massive loss of the Pacific walrus's sea ice habitat threatens the species' continued existence. Indeed, the rapid melting of the Pacific walrus's habitat is already having negative effects on these animals. For example, the loss of summer sea ice in the Chukchi Sea has forced females and young walruses to come to shore at land-based haulouts, leading to high mortality rates among young animals from stampedes and abandonment of calves at sea.

5. In 2011, following the Center's petition to list the walrus as threatened or endangered under the ESA, the Service determined that the Pacific walrus warrants ESA protection. The Service reached this determination upon concluding that climate change would destroy the walrus's sea ice habitat, and cause a substantial population decline. 76 Fed. Reg. 7,634 (Feb. 10, 2011).

6. Since that time, the case for listing the species has only grown stronger, with Arctic sea ice extent hitting numerous record lows; the continued disappearance of summer sea ice from the walrus's foraging grounds in the Chukchi Sea; and new science, widely recognized as the international consensus on climate change, demonstrating the continued, dramatic loss of the walrus's sea ice habitat through at least the end of the century.

7. Nonetheless, the Service has now made a complete reversal, determining that listing the Pacific walrus as threatened or endangered is "not warranted." 82 Fed. Reg. at 46,644. The agency reached this conclusion contrary to the best available science demonstrating the imperiled status of the species.

8. The Service's unexplained about-face is arbitrary, capricious, and violates the ESA. The Service failed to adequately explain its change in position from its 2011 determination that the walrus warrants listing under the ESA; arbitrarily truncated its foreseeable future analysis for threats from climate change; failed to rely on the best available scientific data; drew unsubstantiated conclusions flatly contradicted by the available scientific information; and otherwise failed to conduct the legally required listing analysis.

9. Accordingly, the Center seeks an order declaring the Service's Listing Decision to be arbitrary, capricious, and in violation of the ESA; an order vacating the Service's Listing

Decision; and an order requiring the Service to reconsider listing the walrus under the ESA and issue a new, legally valid decision on a Court-ordered and expeditious schedule.

JURISDICTION AND VENUE

10. The Court has jurisdiction over this matter under 28 U.S.C. § 1331 because this case presents a federal question under the laws of the United States, including the ESA, 16 U.S.C. §§ 1531-1544, and the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 551-706. An actual, justiciable controversy now exists between the Center and the Service, and the requested relief is proper under 28 U.S.C. §§ 2201-2202, 5 U.S.C. §§ 701-706, and 16 U.S.C. § 1540(g). Pursuant to 16 U.S.C. § 1540(g), the Center provided the Service with notice of its ESA violations more than 60 days prior to the commencement of this case.

11. Venue in this Court is proper under 28 U.S.C. § 1391(e). The Service's Alaska Regional office is located in Anchorage, and a substantial part of the events or omissions giving rise to the Center's claims occurred in Alaska.

PARTIES

Plaintiff

12. Plaintiff Center for Biological Diversity ("the Center") is a non-profit, 501(c)(3) organization incorporated in the State of California and maintains offices across the country. The Center has over 63,000 active members and around 1.6 million online activists. The Center works through science and environmental law to advocate for the protection of endangered, threatened, and rare species and their habitats both in the United States and abroad.

13. Through its Oceans and Climate Programs, the Center has worked for years to protect marine mammals in the United States and abroad threatened by climate change, oil and gas development, and other industrial activities. Among other things, the Center petitioned the

Service to list the Pacific walrus as threatened or endangered under the ESA in 2008, and has worked since then to ensure the Pacific walrus is afforded protection under the ESA.

14. The Center brings this case on behalf of itself and its members. Center members regularly visit areas in Alaska where Pacific walruses are known to occur in order to enjoy, study, photograph, recreate, observe, and attempt to observe these animals. Center members use and enjoy, on a continuing and ongoing basis, the habitat of the walrus and the larger ecosystem upon which it depends. Center members derive aesthetic, recreational, scientific, inspirational, educational, and other benefits from these activities. For example, one Center member has lived in various places in Alaska, including Kotzebue on the Chukchi Sea and now lives in Anchorage. He has seen walruses many times and has organized trips to look at sea ice and observe walrus behavior and distribution. On one trip to Hanna Shoal in the Chukchi Sea, he took a helicopter to look for walruses and saw several walruses crowded together on ice floes. He will continue these trips to observe, look for, and appreciate walruses and their habitat in the future, and has concrete plans to do so in future.

15. An integral aspect of the Center's and its members' interests in the walrus is the expectation and knowledge that the walrus is present, healthy, and wild in its native range. For this reason, the Center and its members have an interest in the continued existence of a healthy walrus population in the wild.

16. Center members and staff also regularly participate in efforts to protect and preserve the walrus and its habitat. For example, the Center and its members regularly track, comment on, and litigate over oil and gas projects in the Arctic that would exacerbate the climate change melting the walrus's essential sea ice habitat and harm the walrus.

17. Without the substantial protections of the ESA, Pacific walruses are more likely to decline and become extinct. The Service's decision that listing the Pacific walrus under the ESA is not warranted will reduce the likelihood that Center members may experience Pacific walruses in the wild. The Service's decision has caused the Center and its members to suffer concrete and particularized harms to their scientific, educational, recreational, spiritual, aesthetic, and other interests in the Pacific walrus. The Center and its members will continue to suffer these harms unless the relief requested herein is granted. The injuries of the Center and its members would be redressed by the relief requested in this complaint.

Defendants

18. Defendant Ryan Zinke is the Secretary of the U.S. Department of the Interior and is sued in his official capacity. Secretary Zinke directs all business of the Department of the Interior and is the official ultimately responsible under federal law for ensuring that its decisions comply with all applicable laws and regulations, including the ESA.

19. Defendant U.S. Fish and Wildlife Service is an agency within the U.S. Department of the Interior. The Service is the agency to which the Secretary of the Interior has delegated the authority to conserve threatened and endangered species under the ESA.

20. Defendant James Kurth is the Deputy Director for Operations and Acting Director of the Service and is sued in his official capacity. Mr. Kurth has responsibility for fulfilling and implementing the Service's duties under the ESA.

LEGAL BACKROUND

The Endangered Species Act

21. In enacting the ESA, Congress recognized that endangered and threatened species are of "esthetic, ecological, educational, historical, recreational, and scientific value to the Nation

and its people." 16 U.S.C. § 1531(a)(3). Accordingly, the ESA seeks "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." *Id*. § 1531(b).

22. To accomplish these goals, Section 4 of the ESA requires the Secretary of the Interior, acting through the Service, to list species determined to be "endangered" or "threatened." *Id*. § 1533(a).

23. The ESA defines an "endangered species" as "any species which is in danger of extinction throughout all or a significant portion of its range." *Id*. § 1532(6). The ESA defines a "threatened species" as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." *Id*. § 1532(20).

24. The ESA broadly defines a "species" to include "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." 16 U.S.C. § 1532(16).

25. The ESA does not define "foreseeable future." In 2009, the Department of the Interior's Office of the Solicitor issued an opinion regarding the meaning of "foreseeable future." The opinion directs the Service to interpret "foreseeable future" in accordance with its ordinary meaning. The opinion also directs the Service to adopt a threat-specific approach that analyzes the "foreseeable future" based on the best scientific data available for each threat.

26. The ESA does not define "distinct population segment." In 1996, the Service issued a policy interpreting the phrase "distinct population segment." 61 Fed. Reg. 4,722 (Feb, 7, 1996). Under this policy, the Service must consider the "discreteness of the population segment in relation to the remainder of the species to which it belongs" and "the significance of the

population segment." *Id.* at 4,725. If the population is both discrete and significant, it qualifies as a distinct population segment and, therefore, a "species" for purposes of the ESA. *Id.*

27. The ESA directs the Service to "determine whether any species is an endangered species or a threatened species because of any of the following factors:

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

16 U.S.C. § 1533(a)(1). The ESA requires the Service to list a species if the best scientific and commercial data available show "that the species is endangered or threatened because of any one or a combination of the [five listing] factors." 50 C.F.R. § 424.11(c).

28. The Service must make its listing determinations "solely on the basis of the best scientific and commercial data available." 16 U.S.C. § 1533(b)(l)(A), (c)(2); 50 C.F.R. § 424.11(b), (d). Under this standard, the Service cannot ignore evidence solely on the ground that it lacks complete scientific certainty. Even if the best available scientific and commercial data are quite inconclusive, the Service must still rely on it.

29. Further, in making listing determinations, the Service may not conflate the question of whether a species is threatened or endangered "throughout a significant portion of its range" with the question of whether it is threatened or endangered throughout its entire range.

30. To ensure the timely protection of species at risk of extinction, Congress set forth a detailed process whereby citizens may petition the Secretary to list a species as threatened or endangered. 16 U.S.C. § 1533(b)(3)(A); 50 C.F.R. § 424.14(a). This process includes mandatory

deadlines for the Service to respond to petitions and make final listing determinations. 16 U.S.C. § 1533(b)(3), (5), (6). 50 C.F.R. § 424.14(b)(3).

31. Once a species is listed under the ESA, an array of critical statutory protections applies to insure the continued existence of the species as well to as provide for its recovery to the point where its protection under the Act is no longer necessary. For example, Section 9 prohibits any person from killing, wounding or otherwise harming any member of a protected species. 16 U.S.C. § 1538(a)(1)(B), (g); *see also* 50 C.F.R. § 17.31 (extending the full protections of Section 9 to threatened species).

32. Section 7 of the ESA requires all federal agencies to take affirmative steps to ensure that there is no risk that any of their actions might "jeopardize the continued existence . . . or result in the destruction or adverse modification of habitat" of any listed species. *Id.* § 1536(a)(2). For example, Section 7 requires federal agencies to consult with the Service when their actions may affect a listed species, such as the walrus. *Id.*; 50 C.F.R. § 402.14(a). The purpose of this consultation is to identify reasonable and prudent alternatives that will avoid the action's unfavorable impacts. Additionally, the Service may "suggest modifications" to an action during consultation to "avoid the likelihood of adverse effects" to the listed species even when the action would not by itself jeopardize the species' continued existence. 50 C.F.R. § 402.13(b).

33. Additionally, Section 4(a)(3) requires the Service to designate "critical habitat" for listed species, which are the areas that must be protected to insure the species survival and recovery. *Id*. § 1533(a)(3). Finally, Section 4(f) mandates that the Service develop and implement recovery plans for listed species, a roadmap of how the species can eventually be secure from the risk of extinction and removed from the list of threatened and endangered species. *Id*. § 1533(f).

The Administrative Procedure Act

34. The APA governs judicial review of federal agency actions. 5 U.S.C. §§ 701-706.

35. Under the APA, courts "shall . . . hold unlawful and set aside agency action, findings, or conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Id.* § 706(2)(A), (D).

FACTUAL BACKGROUND

The Pacific Walrus in a Warming Arctic

The Pacific Walrus and the Species' Reliance on Sea Ice Habitat

36. The Pacific walrus (*Odobenus rosmarus divergens*) is a subspecies of the walrus. The Pacific walrus occurs primarily in the shallow shelf waters of the Bering and Chukchi Seas off Alaska and Russia.

37. The Pacific walrus is the largest and most gregarious of the eight ice-breeding pinniped species in the Arctic. Walruses are readily distinguished from other Arctic pinnipeds by an ever-growing pair of tusks. These tusks, modified canine teeth possessed by both male and females, become visible at age two. Walruses use their tusks for defense, for social purposes, and to help them haul out on sea ice by jabbing their tusks into the substrate and pulling themselves forward, inspiring their scientific name meaning "tooth-walking sea horse."

38. Also unique among pinnipeds, the walrus's broad snout is covered by 600 to 700 stiff bristles that help them detect their prey, primarily clams and other bivalve mollusks that inhabit the shallow seafloor (benthos).

Image: U.S. Fish and Wildlife Service

39. Pacific walruses are restricted to the shallow waters of the continental shelf where their benthic prey is abundant and where they can reach the bottom while diving for food. Pacific walruses are usually found in waters no more than 100 meters deep because benthic production is higher at these shallower depths. Most feeding occurs in waters less than 80 meters deep in areas of muddy sand to gravel where benthic productivity is especially high.

40. The Pacific walrus undergoes a seasonal migration between the Bering and Chukchi Seas that is strongly coupled with the distribution of the sea ice. The entire population spends the winter in the Bering Sea. Almost all females and young walruses, along with many males, spend the summer in the Chukchi Sea.

41. Pacific walruses undertake a mass movement southward during fall and early winter and northward in spring and early summer to maintain access to the sea ice. The timing and onset pattern of seasonal ice provide environmental cues for the entire Pacific walrus population to congregate at their breeding sites in the Bering Sea in winter.

42. All Pacific walruses depend on sea ice during the winter, and females, calves, and young walruses depend on sea ice throughout the year as they follow the ice edge seasonally

between the Bering and Chukchi Seas. Walruses require sea ice as a platform for resting between foraging trips to the sea floor, courtship, giving birth, nursing calves, completing their molt, and as passive transport to new foraging areas.

43. For example, Pacific walruses typically forage continuously for one to three days, followed by a period of one to two days when they haul out to rest. Sea ice provides essential resting platforms between foraging trips.

44. Sea ice also provides passive transport to new foraging areas. As walruses follow the edge of the sea ice throughout the year, the sea ice acts as a floating conveyer belt between the Bering and Chukchi Seas that keeps walruses over the shallow, productive continental shelf waters and continually transports them to new foraging grounds.

45. Sea ice also provides an essential platform for the Pacific walrus's reproductive activities including courtship, birthing, and nursing. Pacific walruses have never been observed breeding from coastal haulouts or giving birth in the water or on land.

46. The breeding season is from December to March, and occurs in pack ice habitat in the Bering Sea. Sea ice serves to aggregate females and males on ice floes, which allow males to compete for mates and monopolize access to groups of females.

47. Pacific walruses give birth to a single calf on the sea ice in the Bering Sea during April to June. Calves depend heavily on nursing for at least six months after birth to acquire a sufficient blubber layer, and double in weight in the first five months. Calves feed almost exclusively on their mother's milk for the first year. They are usually fully weaned at age two, though some calves may nurse for another year.

48. Sea ice provides several advantages that influence subsequent calf survival. The sea ice allows Pacific walruses to avoid excessive predation on their dependent young. The sea

ice also provides a safe, dry platform necessary for nursing during the long lactation period. And sea ice provides a critical platform for calves to rest while their mothers forage along the long migratory route between the Bering and Chukchi Seas.

49. Pacific walruses also haul out on sea ice to complete their molt. The growth of new hair in pinnipeds depends on high skin temperatures that allow blood to perfuse the epidermis, and these temperatures are only reached when animals are out of the water and warmed by solar radiation and ambient temperatures. Hauling out on sea ice also keeps walruses safe from predators and human disturbance during their molt.

The Decline in Sea Ice Habitat as the Climate Warms

50. The best available scientific data show that the walrus's sea ice habitat is disappearing. The Arctic is warming at a rate twice as fast as the global average. Arctic sea ice extent is decreasing, ice is thinning, and multiyear ice is covering less of the Arctic Ocean. In addition, sea ice is melting earlier in spring and forming later in fall, and the Arctic is absorbing more solar energy due to this sea ice decline – which further accelerates sea ice loss. Arctic sea ice extent reached record lows in 2017 in January, February, March, and April.

51. Arctic summer sea ice extent has decreased by nearly half during the past few decades. September sea ice extent declined by an average of 13.3% per decade between 1979 and 2016. And the downward September trend has accelerated over the past decade. Arctic sea ice thickness has declined by approximately 40% on average in recent decades due in large part to the loss of older, thicker ice.

52. The Chukchi Sea is experiencing some of the most dramatic loss with essentially ice-free conditions in summer in recent years. For example, between August and October 2012, sea ice concentration in the Chukchi Sea between 70 and 80°N fell below 20%, with a record

minimum concentration of only 5% on September 2, 2012. Sea ice thickness in the Chukchi Sea declined by 64% between 1958 and 2007. Thick multiyear sea ice older than two years has almost entirely disappeared, replaced by thin and more mobile first-year ice. Additionally, the melting season is lengthening as sea ice melts earlier in spring and forms later in autumn.

53. Sea ice structure in the Bering Sea during the winter and spring season has experienced significant changes. Bering Sea ice in winter and spring has become highly variable, is breaking up earlier than historically, and has transitioned to a "mixing bowl" of ice types, with floes moving relatively independently. Pacific walruses' favored ice-type habitat—broken pack—has become almost unrecognizable.

54. The best available scientific data show that sea ice loss will continue, and likely accelerate, through at least the end of the century. The Intergovernmental Panel on Climate Change ("IPCC"), a foremost world authority on climate change, has provided climate change and sea ice loss projections through 2100.

55. In its most recent Fifth Assessment Report, the IPCC describes possible climate futures based on a range of plausible greenhouse gas emissions scenarios. The IPCC models all forecast substantial losses of the Pacific walrus's sea ice habitat. Sea ice declines in all seasons across all emissions scenarios.

56. The Service calculated changes in sea ice cover in the Pacific walrus's range based on the IPCC Fifth Assessment climate models. Under a business-as-usual scenario, the models project a 96% decline in sea ice cover in the U.S. Chukchi Sea and an 82% decline in sea ice cover in the Russian Chukchi Sea in the summer and fall by 2060. The models project that sea ice cover in the entire Chukchi Sea in the summer and fall will decline by 100% by 2100.

57. As climate warming continues, researchers anticipate that sea ice in the Bering Sea will follow a pattern of decline similar to the Chukchi Sea. Under the business-as-usual emissions scenario, the IPCC models further show that spring sea ice in the U.S. Bering Sea will decrease by 69% by 2060 and that spring sea ice cover in the Russian Bering Sea will decrease by 43% by 2060. By 2100, spring sea ice cover in the Bering Sea will be nearly non-existent, declining by 96% in the U.S. Bering Sea and 93% in the Russian Bering Sea. Also by 2100, winter sea ice cover in the U.S. Bering Sea will decline by 92% and by 87% in the Russian Bering Sea.

58. Additional studies not only confirm the downward trend demonstrated in the models, but indicate the models likely underestimate the loss of sea ice. For example, data from the National Snow and Ice Data Center demonstrate that the observed sea ice extent is currently below that projected by all IPCC models. Other studies show that Arctic summer sea ice will virtually disappear before mid-century, with estimates of 2020 or earlier, 2030 on average, and 2040 or later based on three modeling approaches.

The Adverse Impacts of Climate Change, Sea Ice Decline, and Other Stressors on the Walrus

59. The best available scientific data show that climate change and sea ice loss will have a significant negative impact on the Pacific walrus.

60. For example, climate change and sea ice loss will increase walrus concentrations at land-based haulouts which will likely lead to high walrus mortality and injury. When Pacific walruses are distributed on ice floes, they can escape more easily into the water because animals are less concentrated in a single area. When walruses aggregate on land, they often do so in very large numbers, are densely-packed and layered several animals deep. Consequently, the

probability of direct mortality or injury due to trampling during stampedes is greater at land-based haulouts. Calves are especially vulnerable to being crushed to death due to their small size.

61. In addition, climate change will cause a loss of summer sea ice and significant reductions in winter sea ice, which will deprive the Pacific walrus of access to large portions of its foraging habitat on the Chukchi and Bering Sea shelves, resulting in reduced access to food and leading to higher energetic stress.

62. Climate change and sea ice loss will likely increase calf mortality as a result of increased metabolic stress during foraging trips and calf abandonment.

63. Further, climate change will reduce winter sea ice and shrink length of the sea-ice season. Such losses are likely to interrupt the timing and success of walrus breeding activities, including courtship, birthing, and nursing, with consequent negative reproductive impacts.

64. Walruses are already suffering the effects of the loss of their sea ice habitat. For example, scientists estimate that up to 10,000 Pacific walruses died during the summer and fall of 2007 from trampling events at coastal haulout sites in Russia. In 2009, 133 young walruses perished in a stampede at a coastal haulout site in Alaska. And in August 2017, thousands of Pacific walruses were forced ashore near Point Lay, Alaska when sea ice disappeared. This is the earliest haulout event ever documented by U.S. officials. A survey of the area on September 11, 2017 found 64 dead walruses, most of them less than a year old, which were likely trampled to death in a stampede.

65. Ocean acidification also threatens the Pacific walrus. Ocean acidification, resulting from the ocean's uptake of anthropogenic carbon dioxide, is occurring at a rapid pace in the Bering and Chukchi seas. Ocean acidification has already increased the surface acidity of the Bering and Chukchi seas by 30% and is reducing the availability of key chemicals — aragonite

and calcite — that walrus prey species need to build their shells, making ocean waters increasingly corrosive to important walrus prey species. Scientific evidence indicates that Pacific walrus prey has already likely been negatively affected by ocean acidification.

66. Existing regulatory mechanisms are inadequate to protect the Pacific walrus. The lack of adequate regulatory mechanisms to reduce greenhouse gas pollution to levels that are protective of the Pacific walrus's sea ice habitat and marine foraging environment poses a primary threat to the Pacific walrus. The Pacific walrus faces greatly reduced numbers and possibly global extinction in the wild by the end of this century because climate change will destroy the sea ice habitat the species needs to survive.

The Service's 2011 Finding that the Pacific Walrus Warrants Protection Under the ESA

67. In February 2008, the Center petitioned the Service to list the Pacific walrus as a threatened or endangered species because of the considerable threats to the species from climate change, and the loss of its sea ice habitat in particular. The Center's petition summarized, cited, and attached substantial scientific information demonstrating that the Pacific walrus is at serious risk of extinction and warrants protection under the ESA.

68. The petition also requested that in the event the Service found that the Pacific walrus did not warrant protection under the ESA, the Service evaluate whether the walrus population within the Bering and Chukchi Seas is both discrete and significant, constituting a "distinct population segment" of the full walrus species, and/or represents "a significant portion of [the species'] range" and is therefore eligible for listing on such basis.

69. The Service failed to respond to the Center's petition within 90 days as required by the ESA. 16 U.S.C. § 1533(b)(3)(A). The Center filed litigation in federal court in Alaska to compel the agency to respond to the petition.

70. Pursuant to a settlement agreement, the Service issued a 90-day finding in September 2009, in which it found the petition presented substantial information indicating that the petitioned action may be warranted, and began a status review to determine if listing the species was in fact warranted. 74 Fed. Reg. 46,548, 46,548 (Sept. 10, 2009). However, the Service again failed to comply with its statutory deadline to complete the status review and issue its 12-month determination, 16 U.S.C. 1533(b)(3)(B), and the court approved an amended settlement agreement which required the Service to issue its 12-month finding by January 31, 2011.

71. On February 10, 2011, the Service issued a 12-month determination finding that listing the Pacific walrus under the ESA is warranted. 76 Fed. Reg. 7,634 (Feb. 10, 2011).

72. In reaching this decision, the Service analyzed the threats from habitat loss through 2100 because the best available science supported that timeframe. *Id.* at 7,642-43.

73. The Service noted that the models show a 63% decline of sea ice in the Bering Sea in June by mid-century and an 88% sea ice loss in November. *Id.* at 7,643. The Service also acknowledged that substantial declines in Bering Sea ice extent are projected for all months by late century, with losses ranging from 57% in April to 100% loss of sea ice in November. *Id.* The Service noted that, by late century, the onset of substantial freezing in the Bering Sea is projected to be delayed until January, with little or no ice projected to remain in May. *Id*.

74. For the Chukchi Sea, the Service noted that the models project a two-month ice free season by mid-century and a four-month ice free season at the end of the century, centered around the month of September; and that some models show up to five months of no sea ice in the Chukchi Sea by the end of the century. 76 Fed. Reg. at 7,643.

75. The Service found that such losses will make walruses increasingly dependent on coastal, land-based haulouts, which will increase threats to walruses in numerous ways. *Id.* at 7,672. For example, the Service found that increased dependence on land-based haulouts would cause localized prey depletion; increased energetic costs to reach prey, resulting in decreased body condition; increased mortality from stampedes, especially for females, juveniles, and calves; calf abandonment; and increased exposure to predation and hunting. *Id.* The Service determined that there are no regulatory mechanisms that adequately address these threats, and that they will cause a substantial population decline within the foreseeable future. *Id.* at 7,673-74.

76. Consequently, the Service determined that the destruction of the Pacific walrus's sea ice habitat from climate change threatens the Pacific walrus. *Id.* at 7,674. The Service concluded that the Pacific walrus warranted protection under the ESA. *Id.*

77. However, the Service also concluded that listing the species was precluded by other listing priorities, and added the Pacific walrus to the list of candidate species. 76 Fed. Reg. at 7,674

78. The Center and the Service subsequently entered into another settlement agreement over species lingering on the candidate list. The settlement agreement required the Service to submit a proposed rule to list the Pacific walrus or a finding that the Pacific walrus does not warrant ESA listing to the Federal Register by September 30, 2017.

The Service's Reversal, Finding that the Pacific Walrus Does Not Warrant ESA Protection

79. The Service's 2017 Listing Decision was published in the Federal Register on October 5, 2017. 82 Fed. Reg. at 46,618. In its Listing Decision, the Service changed its position from its 2011 determination, and concluded that the Pacific walrus does not warrant listing under the ESA. *Id*. at 46,644.

80. The Service noted that Pacific walruses are impacted by a variety of stressors, and that concerns about the walrus's status as a whole revolve primarily around the loss of sea ice, ocean warming, and ocean acidification associated with climate change. *Id.*

81. The Service continued to find that the primary threat to the Pacific walrus is the loss of sea ice caused by climate change. *Id*. The Service acknowledged that climate models project sea ice loss through 2100, yet defined the foreseeable future for threats to the Pacific walrus from climate change as 2060. *Id.*

82. As part of its listing determination, the Service developed a "Species Status Assessment Report" for the Pacific walrus. *Id.* The Status Assessment purports to summarize and document the biological information the Service assembled, reviewed, and analyzed to inform its decision whether the Pacific walrus warrants protection under the ESA. *Id.*

83. As part of the Status Assessment, the Service developed an abundance model to project changes in stressors acting on the Pacific walrus population to help assess its future viability. The model underestimates stress to the Pacific walrus from sea ice loss, failing to take habitat suitability into account, and assumes that walruses will move with the sea ice habitat as it shifts northward from the Bering to the Chukchi Sea.

84. The model projects an approximately 50% probability stressors that could lead to population decline by 2060 under a business-as-usual greenhouse gas emission scenario, and greater than 60% probability of stressors by 2100.

85. The Service determined that sea ice loss will expose all individuals, but especially calves, juveniles, and females, to increased levels of stress from depletion of prey, increased energetic costs to obtain prey, trampling injuries and mortalities, and predation. The Service further found that some of these stressors are currently acting on the population, and that their

magnitude will increase over time as sea-ice loss occurs regularly and more extensively, and will cause a decline in the Pacific walrus population for the foreseeable future.

86. However, the Service determined that the Pacific walrus should not be listed under the ESA because the magnitude of the threat of increased use of land habitat is uncertain. 82 Fed. Reg. at 76,644.

87. The Service stated that it is uncertain whether land habitat will be of sufficient quality as compared to sea ice. *Id.* at 76,643. The Service admitted that it is not known whether Pacific walrus could adapt to carrying out mating behaviors from the coast and that declines in survival and recruitment and population-level effects would occur if land habitat is inferior. *Id*. The Service construed this uncertainty as evidence that listing the species is not warranted.

88. The Service concluded that the current prey base of Pacific walruses appears adequate to meet the energetic and physiological demands of the population. *Id*. However, the available scientific data indicates that sea ice loss and ocean acidification appear to already be having negative effects on the walrus's prey.

89. The Service's Listing Decision does not explain its change in position from its 2011 determination that the Pacific walrus warranted ESA protection. The Service's Listing Decision does not explain its change in position from its 2011 determination that 2100 was the foreseeable future when analyzing impacts to the Pacific walrus from climate change.

90. The fact sheet accompanying the Listing Decision purports to explain the difference between the two decisions.

91. The fact sheet claims that the two decisions are different because Pacific walruses have shown the ability to change their behavior and adapt, including increased use of land on which to haul out when sea ice is unavailable.

92. However, the available scientific data indicate that as the Pacific walrus loses the sea ice over its foraging grounds, the walrus's response of congregating on shore has higher energetic costs and higher mortality risk compared to being on sea ice. Scientists have concluded that this could have negative population level impacts. The available scientific data also show that walruses have not responded to sea ice loss by spreading themselves out in smaller groups among a larger number of haulout sites, but continue to use a small number of haulout sites with a high risk of trampling risk. Additionally, the available scientific data indicate that Pacific walruses have not responded to loss of summer sea ice in the Chukchi Sea by shifting their range to ice-covered areas in the Canadian Arctic Archipelago or Siberian-Laptev Sea.

93. The fact sheet also claims the two decisions are different because the Pacific walrus population appears to be approaching stability, has higher reproductive and survival rates than in the 1970s and 1980s, and has a relatively larger population size compared to 2011 (an estimated 283,213 walruses in 2017 versus an estimated 129,000 walruses in 2011).

94. However, the most recent study of the Pacific walrus population, which reviewed abundance trends during the past four decades using different models, concluded that the Pacific walrus population may still be in decline and that walrus survival rates declined after 1998.

95. The Service did not analyze whether any "distinct population segment" of the Pacific walrus qualified for listing as threatened or endangered, nor did the Service consider whether the Pacific walrus might be threatened or endangered "in a significant portion of its range."

96. The Service's irrational, unlawful Listing Decision deprives the species of needed protections in the face of climate change and melting sea ice and leaves the Pacific walrus at serious risk of extinction.

CLAIMS FOR RELIEF

First Claim for Relief

Violation of the ESA and APA – Failure to Explain Change in Position

97. The Center re-alleges and incorporates, as if fully set forth herein, each and every allegation in the preceding paragraphs of this complaint.

98. In 2011, the Service concluded that the Pacific walrus is threatened by the destruction, modification, and curtailment of its sea ice habitat and that there are inadequate regulatory mechanisms to address this threat. Accordingly, the Service determined that the Pacific walrus warrants protection under the ESA.

99. The Service's 2017 Listing Decision reaches the opposite conclusion. But the Service failed to explain its change in position. Apart from stating that it made a warranted determination in 2011, the Service's 2017 Listing Decision does not acknowledge its 2011 warranted determination at all.

100. The only effort to explain the Service's new position is in a fact sheet that was not part of the Listing Decision, and in any event entirely fails to reasonably explain the Service's about-face.

101. Accordingly, the Service's Listing Decision violates the ESA, 16 U.S.C. §§ 1532, 1533, and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation of the APA, 5 U.S.C. § 706(2)(A).

Second Claim for Relief

Violation of the ESA and APA – Improper Foreseeable Future Analysis

102. The Center re-alleges and incorporates, as if fully set forth herein, each and every allegation in the preceding paragraphs of this complaint.

103. Under the ESA, the Service must list a species as "threatened" if 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).

104. In its Listing Decision, the Service defined the "foreseeable future" for threats from climate change as 2060. But the best available scientific data on climate change project sea ice loss through 2100.

105. The Service's interpretation and analysis of the foreseeable future for threats to the Pacific walrus from climate change is inconsistent with the plain meaning of "foreseeable," inconsistent with the Department of the Interior's guidance on how the agency should interpret and apply the foreseeable future, and inconsistent with the Service's 2011 determination that the Pacific walrus warrants protection under the ESA.

106. The Service's Listing Decision therefore violates the ESA, 16 U.S.C. §§ 1532, 1533, and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation of the APA, 5 U.S.C. § 706(2)(A).

Third Claim for Relief

Violation of the ESA and APA – Failure to Consider the Best Available Scientific Data and Reaching Conclusions Contrary to the Best Available Scientific Data

107. The Center re-alleges and incorporates, as if fully set forth herein, each and every allegation in the preceding paragraphs of this complaint.

108. The Service's determination of whether the walrus constitutes a threatened or endangered species under the ESA must be based "solely on the basis of the best scientific and commercial data available." 16 U.S.C. § 1533(b)(l)(A), (c)(2).

109. The Service's Listing Decision is not based on the best available scientific data. For example, the Service failed to consider the available data of threats to the Pacific walrus

beyond 2060. These data include studies documenting the widespread destruction of the Pacific walrus's sea ice habitat through 2100, such as the IPCC models reflected in its Fifth Assessment Report; studies that not only confirm the downward trend demonstrated in the IPCC models, but indicate the models likely underestimate sea ice loss; and information in the Status Assessment indicating that the Pacific walrus's habitat will be nearly non-existent by 2100. The Service also ignored available information of the threats posed by projected habitat loss through 2060.

110. The Service's findings and conclusions also flatly contradict or inaccurately represent the available scientific data and are unsubstantiated. For example, the Service concluded that, in response to changing habitats, Pacific walruses can change their behavior, adapt to greater uses of land, and shift their range. However, the available scientific information indicates that walruses continue to use small number of haulout sites with high risk of trampling, that they have not shifted their range and may not be able to do so, and that congregating on shore has higher energetic costs and higher mortality risk than being on sea ice and may be maladaptive at the population level. The Service also found that the Pacific walrus population appears to be reaching stability. But the most recent population abundance study found that the walrus population may be declining.

111. The best scientific data available indicate that the Pacific walrus meets the definition of a threatened or endangered species. The Service's Listing Decision fails to articulate a valid, rational explanation for the Service's conclusions to the contrary.

112. Accordingly, the Service's Listing Decision violates the ESA, 16 U.S.C. § 1533(b)(1)(A); 50 C.F.R. § 424.11, and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation of the APA, 5 U.S.C. § 706(2)(A).

Fourth Claim for Relief

Violation of the ESA and APA – Improper and Inconsistent Treatment of Scientific Uncertainty

113. The Center re-alleges and incorporates, as if fully set forth herein, each and every allegation in the preceding paragraphs of this complaint.

114. The Service's Listing Decision improperly relies on uncertainty as affirmative evidence that listing the Pacific walrus is not warranted.

115. The Service also treated scientific uncertainty inconsistently, dismissing the negative impacts of sea ice loss beyond 2060 because of uncertainty, while relying on uncertainty to conclude that the walrus would be able to adapt to the loss of its sea ice habitat, that the population is approaching stability, and that subsistence harvest would remain sustainable.

116. The Service's Listing Decision therefore violates the ESA, 16 U.S.C. § 1533, and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation of the APA, 5 U.S.C. § 706(2)(A).

Fifth Claim for Relief

Violation of the ESA and APA – Failure to Conduct the Proper Listing Analysis

117. The Center re-alleges and incorporates, as if fully set forth herein, each and every allegation in the preceding paragraphs of this complaint.

118. The ESA defines "species" to include "any distinct population segments" of vertebrate species. 16 U.S.C. § 1532(16). The ESA defines an "endangered species" as "any species which is in danger of extinction throughout all or a significant portion of its range." *Id*. § 1532(6). The ESA defines a "threatened species" as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its

range." *Id*. § 1532(20). In determining whether a species is threatened or endangered, the ESA requires the Service to analyze the threats posed by each of the listing factors both individually and in the aggregate. 16 U.S.C. § 1533; 50 C.F.R. § 424.11(c).

119. The Service did not analyze whether any "distinct population segment" of the Pacific walrus qualified for listing as threatened or endangered.

120. The Service did not consider whether the Pacific walrus might be threatened or endangered "in a significant portion of its range." Instead, the Service found no portions of its range where potential threats are significantly concentrated or substantially greater than in other portions of its range, nor any portions where the species may be in danger of extinction or likely to become so in the foreseeable future. Such findings are conclusory, improper, and not supported by the available evidence. The Service's interpretation of what constitutes a significant portion of the Pacific walrus's range is unlawful.

121. The Service failed to examine how all of the threats to the Pacific walrus in combination may affect the species' survival.

122. Accordingly, the Service's Listing Decision violates the ESA, 16 U.S.C. §§ 1532, 1533; 50 C.F.R. § 424.11(c), and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, in violation of the APA, 5 U.S.C. § 706(2)(A).

REQUEST FOR RELIEF

WHEREFORE, the Center respectfully requests that the Court:

1. Find and declare the Service's Listing Decision violates the ESA and is arbitrary, capricious, an abuse of discretion, not based on the best scientific data available, and otherwise not in accordance with law;
2. Set aside the Service's Listing Decision;

3. Order the Service to reconsider the listing of the Pacific walrus under the ESA and issue a new 12-month finding on a Court-ordered and expeditious schedule;
4. Award the Center its costs of litigation, including reasonable attorneys' fees; and
5. Grant such other relief as the Court deems just and proper.

Dated: March 8, 2018

Center for Biological Diversity

s/ Kassia Siegel

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