United States Senate
WASHINGTON, DC 20510

September 28, 2017

Principle Deputy Director Greg Sheehan
U.S. Fish and Wildlife Service,
United States Department of Interior
1849 C. Street, NW, Washington, DC 20240

Dear Principle Deputy Director Sheehan:

We write to urge you to make a determination that the Pacific walrus is *not* endangered or threatened with endangerment under the Endangered Species Act. Pursuant to a 2011 settlement agreement, the U.S. Fish and Wildlife Service (FWS or The Service) is required to make a determination of whether the Pacific walrus is a threatened or endangered species by the end of September 2017.[1] In 2011 the FWS found that "After review of all the available scientific and commercial information, … that listing the Pacific walrus as endangered or threatened is warranted."[2] Despite this finding, FWS precluded a listing decision. Our review of the information available in 2011 and new information since 2011 indicates that an endangered or threatened listing decision would be inappropriate. Thus, we urge you to make a determination that listing the Pacific walrus under the ESA is not warranted by the best available science and commercial data.

Reviewing the existing science in consultation with biologists as well as the ESA's requirements, it is clear that: 1) the Pacific walrus *should not be considered a species* under the ESA, and 2) the Pacific walrus *is not presently endangered or threatened with extinction in the foreseeable future.*

I. Making a determination based on an inherently subjective subspecies definition, would be speculative and unwarranted given the existing, quantifiable science on the Pacific walrus.

FWS consideration of the Pacific walrus, a subjectively defined subspecies, raises serious concerns over whether the assumptions, projections, and data underlying the 2011 warranted but precluded decision are accurate, definable, and sufficient to base a final listing determination on. The Pacific walrus is not a species, but is considered a subspecies. While a subspecies is included in the ESA definition of species, the subspecies category is well-known to be

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[1] Ctr. For Biological Diversity v. Salazar, STIPULATED SETTLEMENT AGREEMENT 5, (July 12, 2011), available at http://www.biologicaldiversity.org/programs/biodiversity/species_agreement/pdfs/proposed_settlement_agreement.pdf

[2] Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List the Pacific Walrus as Endangered or Threatened 76 Fed. Reg. 7634, 7634 (Feb. 10, 2011).

scientifically subjective, as described in the scientific literature.[3] Additionally, it has been acknowledged by FWS, in the warranted but precluded finding that there is limited data on the existing population numbers and range of the Pacific walrus. Without more definite data and transparent definitions of the species, a listing determination would be too speculative and difficult to justify. In the spirit of using the best available science, we urge you to acknowledge these issues and conclude a determination to list the Pacific walrus would be inappropriate at this time.

II. Under the requirements of the ESA, the Pacific Walrus is neither endangered nor threatened with extinction.

Under the existing best scientific record and without substantial new information, the Pacific walrus cannot be determined to be threatened or endangered with extinction. Under Section 4(a)(1) of the ESA, FWS makes determinations of whether a species is endangered or threatened due to: "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."[4] The prediction of extinction of an entire species (or subspecies in the case of the Pacific walrus) is a serious scientific exercise and thus must be made "solely on the basis of the best scientific and commercial data available ...."[5] A review of the scientific data available in 2011 and more recently raises significant doubts over whether a listing determination is warranted under the ESA.

A. The 2011 Warranted but Precluded Decision was not justified by existing scientific data in 2011.

Credible science existed in 2011 that directly contradicted the FWS's finding regarding the Pacific walrus. In its 2011 warranted but precluded finding, the FWS found the Pacific walrus to be endangered or threatened, based mainly on potential loss of sea ice due to climate change over the next century.[6] Yet credible data from a U.S. Geological Survey (USGS) modeling study in 2011 found a starkly different result than FWS did in the 2011 warranted but precluded finding: "The probabilities of rare and extirpated states (of Pacific walrus) each progressively increased but remained <10% (i.e., less than 10%) through the end of the century. The summed probabilities of vulnerable, rare, and extirpated (P(v,r,e)) increased from a current level of 10% in 2004 to 22% by 2050 and 40% by 2095."[7] A probability of extirpation (i.e., extinction) less

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[3] Cronin, M.A. 2015. The Greater Sage-Grouse Story: Do we have it right? Rangelands. 37:200-204. Cronin, M.A. 2006. A Proposal to eliminate redundant terminology for intra-species groups. Wildlife Society Bulletin 34:237-241.

[4] 16 U.S.C. § 1533(a)(1) (2016)

[5] 16 U.S.C. § 1533(b)(1)(A) (2016)

[6] 76 Fed. Reg. at 7640-4650.

[7] Jay et al., 2011, page 1065

than 10% does not warrant a determination that the species is threatened or endangered with extinction. Nor does a combined probability of being vulnerable, rare, or extirpated of less than 41%. Such a determination requires selective use of information and speculation.

The basis for the 2011 warranted but precluded finding also focused heavily on population declines, but not actual or foreseeable risks of extinction. The studies found:

> "Although the loss of summer sea-ice habitat can reasonably be expected to result in a population decline, it is difficult to predict the rate and magnitude of population changes. The Pacific walrus population is large relative to other walrus populations, with a recent minimum abundance estimate of 129, 000 animals (Speckman et al., 2010)."[8]

The study found further, "These factors are expected to result in a population decline over time; however, the magnitude of the decline is unknown."[9] Therefore, the determination that the Pacific walrus was endangered or threatened with extinction was based on a logic jump that future population declines equal, at the least, risk of extinction in the foreseeable future. This is not the case. Instead, "data are not available on walrus vital rates to parameterize a population viability model – arguably the best approach to quantify extinction risk."[10] Thus, the data existing at the time of warranted but precluded finding in 2011 did not justify the finding and cannot justify a final determination listing the Pacific walrus.

B. New available science and commercial data do not justify a listing decision that the Pacific walrus is threatened or endangered with extinction.

New information obtained since 2011 does not give definitive evidence for a determination that the Pacific walrus is threatened or endanger of extinction under the Endangered Species Act. To justify a listing decision the FWS must show that the Pacific walrus is in danger of extinction or likely to be in danger of extinction within the foreseeable future after full consideration the best available science and commercial data.[11] Modeling and stock assessments since 2011 do not reasonably support a final listing decision under the ESA.

First, the number of Pacific walrus are currently in the hundreds of thousands with a wide distribution in the Bering and Chukchi Seas, and they are not close to extinction. The 2014 Stock Assessment Report Revision for the Pacific walrus Alaska Stock (FWS 2014) states, "the number of Pacific walruses within the area surveyed in 2006 was estimated at 129,000 with a 95% confidence interval of 55,000 to 507,000."[12] The stock assessment also found that "[t]he estimate from the 2006 survey is also negatively biased which provides reasonable assurance that the walrus

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[8] Garlich-Miller et al., 2011 at 30
[9] Id., at 111
[10] Id., at 92
[11] 16 U.S.C. 1533(a)(1), (b)(1)(A)
[12] 2014 Stock Assessment Report Revision citing at 5 (Speckman *et al.* 2011) ("[S]ome areas known to be important to walruses were not surveyed in 2006 because of poor weather and therefore the 2006 estimate is also considered to be an underestimate.")

population size is greater."[13] Finally, the 2014 Stock Assessment Report Revision (FWS 2014) also noted "Garlich-Miller *et al.* (2011*a*) predicted that changing sea ice dynamics will result in further population declines in the future, but could not specify the magnitude or rate of decline."[14]

Additionally, modeling by a FWS biologist clearly suggests a low probability of the threat of extinction for the Pacific walrus. This modeling suggests four hypotheses regarding the future population trends of the Pacific walrus:

1. "...the population will decline to a level dictated by prey resources that can be accessed from fall coastal haulouts and most likely fluctuate at that level. The information needed to reliably predict the rate or magnitude of the population decline is not available."
2. "...expect the population to decline to a point where the probability of extinction increases substantially."
3. "...over the long-term walruses eventually migrate from the Bering and Chukchi Seas to sea-ice refugia in the eastern Siberian-Laptev Seas and the Canadian Arctic where the population either stabilizes at the carrying capacity of those areas or declines to lower numbers."
4. "...expect the population to decline until sea ice recovers to near previous patterns and then to increase or fluctuate at a reduced abundance due to subsistence harvest."[15]

While the modeling suggests the possibility of an increased probability of extinction, this is one of many possible projections. Further, these hypotheses are derived from models with inherent assumptions and uncertainties. Other modeling efforts of the future status of Pacific walrus did not have explicit assessments of extinction risk, relied on expert opinion, and had considerable uncertainty.[16]

Taken together these studies show a lack of adequate data and significant uncertainty regarding estimating the current Pacific walrus population numbers as well as predicting their future number with accuracy. The available information is clearly not adequate to predict the extinction of Pacific walrus with any scientific certainty.

III. Conclusion

The FWS and USGS have been doing good work on the Pacific walrus, a species that is extremely hard to monitor and study because of its remote and hostile environment. We appreciate their efforts and their clear acknowledgement of incomplete data and the uncertainties of predicting future population status. I also appreciate the potential for negative impacts on the walrus due to changing sea ice habitats and other factors. However, a determination that the Pacific walrus is threatened or endangered with *extinction* is simply not supported by available data. Instead, we urge the Service to continue its research, monitoring, and adaptive management of the walrus.

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[13] Id. at 7
[14] Id. at 8
[15] MacCracken 2012, page 2084
[16] MacCracken et al., 2013

Sincerely,

Dan Sullivan	Lisa Murkowski	Don Young
United States Senator	United States Senator	Congressman for All Alaska

Cc: Ryan Zinke, Secretary of Interior
Senator John Barrasso, Chairman Senate Committee on Environment and Public Works
Senator Tom Carper, Ranking Member Senate Committee on Environment and Public Works
Governor Bill Walker.