

HONORABLE GEORGE J. JORDAN  
ADMINISTRATIVE LAW JUDGE

UNITED STATES OF AMERICA  
DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

---

*In re:*

**Proposed Waiver and Regulations Governing  
the Taking of Eastern North Pacific Gray  
Whales by the Makah Indian Tribe**

---

)  
) Docket No. 19-NMFS-0001  
)  
) RIN: 0648-BI58 and  
) RIN: 0648-XG584  
)

**NATIONAL MARINE FISHERIES SERVICE'S POST-HEARING BRIEF**

## EXPLANATION OF CITATIONS TO THE RECORD

NMFS's Post-Hearing Brief uses the format described below to cite to following documents comprising part of the hearing record in this matter.

NMFS Citation	Full Citation	Filing Date
<b>NMFS Declarations</b>		
Yates Decl.	Declaration of Chris Yates, dated April 2, 2019	04-05-2019
Third Yates Decl.	Third Declaration of Chris Yates, dated August 5, 2019	08-06-2019
Fourth Yates Decl.	Fourth Declaration of Chris Yates, dated August 5, 2019	08-06-2019
Fifth Yates Decl.	Fifth Declaration of Chris Yates, dated September 10, 2019	09-11-2019
Bettridge Decl.	Declaration of Dr. Shannon Bettridge, dated April 1, 2019	04-05-2019
Second Bettridge Decl.	Declaration of Dr. Shannon Bettridge, dated August 6, 2019	08-06-2019
Third Bettridge Decl.	Declaration of Dr. Shannon Bettridge, dated August 6, 2019	08-06-2019
Weller Decl.	Declaration of Dr. David Weller, dated April 1, 2019	04-05-2019
Second Weller Decl.	Second Declaration of Dr. David Weller, dated August 6, 2019	08-06-2019
Third Weller Decl.	Third Declaration of Dr. David Weller, dated September 11, 2019	09-11-2019
Moore Decl.	Declaration of Dr. Jeffrey Moore, dated April 1, 2019	04-05-2019
Second Moore Decl.	Second Declaration of Dr. Jeffrey Moore, dated August 5, 2019	08-06-2019

<b>NMFS Citation</b>	<b>Full Citation</b>	<b>Filing Date</b>
<b>NMFS Exhibits</b>		
NMFS Exs. 1-1 to 1-15	Appended to the Declaration of Chris Yates, dated April 2, 2019	04-05-2019
NMFS Exs. 1-19 to 1-20	Appended to the Third Declaration of Chris Yates, dated August 5, 2019.	08-06-2019
NMFS Exs. 1-21 to 1-24	Appended to the Fourth Declaration of Chris Yates, dated August 5, 2019.	08-06-2019
NMFS Exs. 2-1 to 2-11	Appended to the Declaration of Dr. Shannon Bettridge, dated April 1, 2019	04-05-2019
NMFS Exs. 2-14 to 2-21	Appended to the Third Declaration of Dr. Shannon Bettridge, dated August 6, 2019	08-06-2019
NMFS Exs. 3-1 to 3-84	Appended to the Declaration of Dr. David Weller, dated April 1, 2019	04-05-2019
NMFS Exs. 3-85 to 3-91	Appended to the Second Declaration of Dr. David Weller, dated August 6, 2019	08-06-2019
NMFS Exs. 3-92 to 3-100	Appended to the Third Declaration of Dr. David Weller, dated September 11, 2019	09-11-2019
NMFS Exs. 4-1 to 4-12	Appended to the Declaration of Dr. Jeffrey Moore, dated April 1, 2019	04-05-2019
NMFS Exs. 4-13 to 4-15	Appended to the Second Declaration of Dr. Jeffrey Moore, dated August 5, 2019	08-06-2019
<b>Hearing Transcript</b>		
Tr.-1	Hearing Transcript, Day 1	11-14-2019
Tr.-2	Hearing Transcript, Day 2	11-15-2019
Tr.-3	Hearing Transcript, Day 3	11-18-2019
Tr.-4	Hearing Transcript, Day 4	11-19-2019
Tr.-5	Hearing Transcript, Day 5	11-20-2019
Tr.-6	Hearing Transcript, Day 6	11-21-2019

## I. INTRODUCTION

The National Marine Fisheries Service (“NMFS”) initiated this formal rulemaking process in response to a request by the Makah Indian Tribe (“Makah Tribe” or “Tribe”) for authorization under the Marine Mammal Protection Act (“MMPA”)<sup>1</sup> to carry out a ceremonial and subsistence hunt for Eastern North Pacific (“ENP”) gray whales. After years of intensive evaluation, NMFS has put forth an extremely conservative hunt proposal that has been vetted by the world’s foremost gray whale scientists, including NMFS’s lead gray whale experts, the International Whaling Commission’s Scientific Committee, and the federal Marine Mammal Commission. All of these experts agree that NMFS’s hunt proposal is based on the best available scientific information and is appropriately precautionary, not only with respect to the ENP gray whale stock, but also with respect to the Pacific Coast Feeding Group (“PCFG”) and the western North Pacific (“WNP”) gray whale stock.

In contrast with the body of scientific evidence adduced by NMFS, the whaling-opponent parties to this proceeding have presented speculation, unfounded inferences, and “gut feelings” to argue that the proposed hunt – which would result in removal of an extremely small fraction of the ENP gray whale stock and would occur within a tiny fraction of the stock’s range – is biologically reckless and would lead to unknown dire consequences. The whaling opponents’ opposition stems largely from their ideological opposition to any killing of whales. NMFS’s and this Tribunal’s decision-making, however, must be based on the biological and ecological effects of the proposed hunt as evaluated under the MMPA’s “best available scientific evidence” standard and the Administrative Procedure Act’s (“APA’s”)<sup>2</sup> “substantial evidence” standard.

---

<sup>1</sup> 16 U.S.C. §§ 1361 *et seq.*

<sup>2</sup> 5 U.S.C. §§ 500 *et seq.*

Because none of the parties to this proceeding have submitted persuasive evidence contradicting the conclusions of NMFS's experts nor any legal basis to withhold the waiver, the proposed waiver and regulations should be issued.

## II. BACKGROUND

### A. Factual Background

The facts relevant to this matter are set forth in detail in NMFS's Proposed Findings of Fact and Conclusions of Law ("NMFS's Proposed Findings"), filed herewith, and summarized below.

#### 1. Gray Whales

In developing the proposed waiver and regulations, NMFS considered the potential effects of the proposed hunt on three groups of gray whales: the ENP stock, the WNP stock, and the PCFG. Yates Decl. ¶ 26. The ENP stock, whose range extends from northern Mexico/southern California to the Bering, Beaufort, and Chukchi Seas, has been within its optimum sustainable population ("OSP") levels<sup>3</sup> since at least 1995 and is considered healthy. NMFS's Proposed Findings ¶¶ 6, 78, 88.<sup>4</sup> NMFS routinely surveys ENP stock abundance and has data dating back to 1967. *Id.* ¶ 77. Overall, ENP stock abundance nearly doubled over the first 20 years of monitoring and has fluctuated over the last 30 years. *Id.* ¶ 83. Carrying capacity of the ENP stock, which varies with environmental conditions, was estimated at 25,808 whales in 2009. *Id.* ¶ 89. It is expected that a stock at or near carrying capacity will be more susceptible to environmental fluctuations. *Id.* ¶ 90. The ENP stock has demonstrated resiliency in

---

<sup>3</sup> The MMPA defines "optimum sustainable population" as "the number of animals which will result in the maximum productivity of the population," keeping in mind the carrying capacity of the habitat and the health of the population's ecosystem. 16 U.S.C. § 1362(9); *see also* 50 C.F.R. § 213.3; Proposed Rule, 84 Fed. Reg. at 13,605.

<sup>4</sup> "NMFS's Proposed Findings" refers to NMFS's Proposed Findings of Fact and Conclusions of Law, filed herewith.

recovering from commercial whaling and has increased in abundance despite climate change and ongoing human disturbance within its range, including nearshore industrialization, shipping, fishing, whale-watching, oil and gas exploration, ocean acidification, and hunting by Chukotkan natives. *Id.* ¶¶ 81-83, 85-89, 94-99. The best available abundance estimate for the ENP stock based on data through 2016 is 26,960. *Id.* ¶ 91. The proposed hunt area encompasses less than one percent of the lineal distance of the ENP stock’s range. *Id.* ¶ 80.

In May 2019, NMFS declared an unusual mortality event (“UME”) for ENP gray whales. *Id.* ¶ 100. The UME process, established through 1992 amendments to the MMPA, provides a process and resources to support investigations into marine mammal die-offs. Third Bettridge Decl. ¶¶ 2-7. As of the date of the hearing in this matter (November 14, 2019), NMFS had documented 214 stranded gray whales. *Id.* NMFS’s Proposed Findings ¶ 101. For the ENP stock, researchers estimate that between 3.9 and 13 percent of ENP gray whales that die are documented. *Id.* ¶ 102. It is therefore reasonable to presume that the ENP stock’s abundance may have dropped from the most recent estimate of around 27,000 to around 21,000-25,000 animals. *Id.* The 2019 UME is ongoing and remains under investigation. *Id.* ¶ 104. NMFS is in the process of completing the 2019-2020 ENP gray whale survey and will have an updated abundance estimate for the stock sometime in 2020. *Id.*

Previously, in 1999, NMFS declared a UME for ENP gray whales, which was officially closed in December 2001. *Id.* ¶ 94. During the 1999-2000 UME, the ENP stock’s abundance dropped from around 21,000 to 16,000. *Id.* ¶ 95. Abundance remained within the stock’s OSP levels during the UME. *Id.* ¶ 97. The investigative team examined a number of potential factors but considered nutritional stress likely to be the dominant factor. Fourth Yates Decl. ¶ 4; NMFS Ex. 1-21, 2-14. The team considered potential causes for large-scale starvation, including El

Niño related changes in prey distribution and abundance and food limitations due to the population's high density. *Id.* Ultimately, the cause of the 1999-2000 UME was considered to be undetermined. *Id.*; NMFS's Proposed Findings ¶ 94. After the 1999-2000 UME, calf production increased and the ENP stock grew to the highest levels ever recorded. *Id.* ¶ 96. Because the MMPA's UME provisions were enacted in 1992, there may have been other gray whale die-offs that would have qualified as a UME prior to 1992 but were not labeled as such. *Id.* ¶ 98. For example, in 1987-88, the ENP stock was estimated at 26,916; it then fell to 15,762 in 1992-93, and increased to 20,103 in 1993-94. *Id.* ¶ 99.

The WNP stock is listed as an endangered species under the Endangered Species Act and is designated as depleted under the MMPA. *Id.* ¶ 6. Data on WNP abundance has been regularly collected since the mid-1990s and surveys are carried out annually. *Id.* ¶ 174. Since 2005, WNP stock abundance has increased around two to five percent per year. *Id.* ¶ 175. Current abundance of the WNP stock is estimated to be 290. *Id.* ¶ 174. Although WNP gray whales generally range in the western North Pacific Ocean, some WNP gray whales have been documented traveling to the ENP stock's migratory range during the December through May migration season. *Id.* ¶¶ 171-173. No WNP gray whales have been recorded within the ENP stock's range between June and November. *Id.* ¶ 7. The best available estimate is that 45-80 percent of the WNP gray whale stock cross over to the ENP range during the migration season annually. NMFS's Proposed Findings ¶ 172.

PCFG whales are a feeding aggregation defined as gray whales observed between June 1 and November 30 within the region between northern California and northern Vancouver Island (from 40 degrees N lat. to 52 degrees N lat.) and photo-identified within this area during two or more years. NMFS Proposed Findings ¶ 8. PCFG whales travel widely within and outside of

their defined range, likely due to shifts in prey availability. *Id.* ¶ 115. They generally do not show fidelity to an area smaller than one degree of latitude, which is 60 nautical miles. *Id.* ¶ 117. The PCFG is a component of the ENP gray whale stock and currently numbers 232 animals, based on data available through 2016-17. *Id.* ¶¶ 9, 120. Surveys of PCFG abundance and mixing proportions are conducted annually, and updated abundance estimates are published every one to two years. *Id.* ¶ 121. PCFG whales are recruited both internally (a calf born to a PCFG mother that recruits into the PCFG) and externally (a non-PCFG gray whale that recruits into the PCFG). *Id.* ¶ 116. Based on the best available estimates, levels of internal and external recruitment into the PCFG are about equal. *Id.* PCFG abundance has been stable or increasing since around 2002, with an average annual increase in abundance of 3.5 animals between 2002 and 2015. *Id.* ¶ 122. The proposed hunt area is around four percent of the lineal distance of the PCFG's defined range. *Id.* ¶ 122.

## **2. Proposed Hunt Management Measures**

NMFS adopted two primary management goals to guide development of the proposed waiver and regulations: (1) limiting the likelihood that tribal hunters would strike or otherwise harm a WNP gray whale, and (2) ensuring that the hunt does not cause PCFG abundance to decline below recent stable levels. *Id.* ¶ 30. Regarding the first objective, although the Tribe is not requesting a waiver for WNP gray whales, and although the presence of WNP gray whales within the hunt area is uncommon, NMFS determined that minimizing hunt-related risk to any WNP gray whales that might be present was an important consideration and developed a number of protections to minimize such risk. *Ex.* ALJ-002 (84 Fed. Reg. at 13,608). Regarding the

second objective, although the PCFG is not a “stock” as defined under the MMPA,<sup>5</sup> NMFS must give “due regard” to the ENP stock’s distribution and migratory movements. Ex. ALJ-002 (84 Fed. Reg. at 13,608). NMFS therefore developed measures to ensure that hunting does not contribute to a PCFG abundance declining below recent stable levels, in order to maintain the ENP stock’s distribution within the PCFG range. *Id.*

Several aspects of the proposed hunt were designed to serve both of NMFS’s objectives, including:

- limiting the waiver period to 10 years;
- limiting hunt permits to a maximum of three years for an initial permit and five years for any subsequent permits; and
- alternating hunt seasons—
  - “even-year hunts” – hunting allowed only from December 1 of an odd-numbered year to May 31 of an even-numbered year; even-year hunts would occur during the migration season, when hunters may possibly encounter a WNP whale but are less likely to encounter a PCFG whale;
  - “odd-year hunts – hunting allowed only from July 1 to October 31 of odd-numbered years; odd-year hunts would occur during the PCFG summer feeding season, when WNP whales are not expected to be present;
- limits on the total number of unsuccessful strike attempts, training harpoon throws, and approaches allowed during hunting.

NMFS’s Proposed Findings ¶¶ 28-29, 31-34. 41. Limiting the duration of the waiver and of hunt permits would ensure that the hunt does not result in unanticipated adverse effects and allows for adaptive management. *Id.* ¶¶ 28-29. Alternating hunt seasons balance risk to WNP whales and PCFG whales. *Id.* ¶ 31; Ex. ALJ-002 (84 Fed. Reg. at 13,608) The overall limits on

---

<sup>5</sup> The MMPA defines “stock” or “population stock” as “a group of marine mammals of the same species or smaller taxa in a common spatial arrangement, that interbreed when mature.” 16 U.S.C. § 1372(11). NMFS previously considered whether the PCFG meets this definition and determined that it did not, so the PCFG are classified as part of the ENP stock. Bettridge Decl. ¶¶ 15-16.

unsuccessful strike attempts, training harpoon throws, and approaches are to ensure that gray whales are not subject to levels of disturbance that would have a lasting effect on their health or behaviors. NMFS's Proposed Findings ¶ 41.

Additional management measures to reduce risk to WNP gray whales include:

- limit of three struck whales during even-year hunts;
- limit of one struck whale within a 24-hour period as a precaution against striking multiple WNP whales that might be travelling together;
- no hunting allowed during November or June (which are generally considered part of the summer feeding season) to avoid any early/late migrating whales;
- restrictions on training harpoon throws during the migration season;
- requirement that, after a whale is landed in an even-year hunt, hunting must stop until NMFS determines whether the whale was a WNP whale;
- all hunting must cease if NMFS determines that a WNP whale was struck, unless and until NMFS determines that additional measures were taken to eliminate the risk of a WNP whale being struck in the future, for example, by limiting hunting to odd-year hunts.

NMFS's Proposed Findings ¶¶ 35, 41, 57-60.

Based on these restrictions, NMFS's scientists analyzed the risk that the hunt would pose to WNP whales and determined there is a 0.5 percent chance that a whale encountered during an even-year hunt would be a WNP gray whale, a 1.5 percent chance of hunters striking a WNP gray whale during one season of hunting, and a 7.4 percent chance of hunters striking one WNP gray whale over the 10-year waiver period, meaning that if the proposed hunt were carried out continuously, one WNP gray whale would be struck every 135 years. *Id.* ¶¶ 176-180. They concluded that the risk of a WNP whale being subjected to an unsuccessful strike attempt or training harpoon throw was about nine percent per year or 37 percent over ten years, and that an average of 1.8 WNP whales per year could be approached, based on conservative assumptions.

*Id.* ¶¶ 182-186.

NMFS's proposed hunt management scheme also includes a number of measures to ensure that hunting does not cause PCFG abundance to decline within their recent stable abundance levels. *Id.* ¶¶ 30-31. The purpose of these measures is to ensure that the hunt does not affect the range-wide distribution of ENP gray whales, including within the PCFG range. *Id.*

¶ 140. The PCFG protections include:

- limit of two struck whales and one landing during odd-year hunts;
- limit of 16 PCFG whales struck over the 10 year waiver period (average 1.6 / year), with a sublimit of 8 struck PCFG females (average 0.8 / year);
- “low-abundance triggers” – hunting would not be authorized if the current or projected PCFG abundance estimate were below 192 whales, or if the current or projected minimum abundance estimate were below 171 whales.

The limits of two struck whales and one landing leave the possibility of a single strike in a given hunt season. *Id.* ¶¶ 35, 37-38, 43, 61. The limit of 16 struck PCFG whales would count against the overall 25 strike-limit for the 10-year waiver period. *Id.* Allowing that only half of the PCFG strikes could be PCFG females is consistent with the best scientific evidence available, which shows that the PCFG male/female ratio is approximately 50/50. *Id.* ¶ 38. Finally, use of the low-abundance triggers would ensure that hunting does not contribute to PCFG abundance declining below recent stable levels. *Id.* ¶ 61.

The proposed waiver and regulations would use photo-identification (or genetic matching when possible) to enforce the PCFG strike limits and monitor effects to WNP gray whales. *Id.* ¶¶ 44-50. NMFS developed detailed protocols to implement the photo-identification procedures. *Id.* ¶ 51. The proposed waiver and regulations also impose a threshold requirement that adequate photographic catalogs be available to allow for effective whale identification prior to NMFS's issuance of any hunt permit. *Id.* ¶ 50. NMFS's proposal also includes detailed hunt monitoring and reporting protocols and establishes a robust framework for ensuring that the hunt is

conducted safely and the MMPA's "humaneness" requirement is met via the hunt permitting process. *Id.* ¶¶ 67-68 The proposed waiver and regulations provide for the Tribe to utilize edible and non-edible gray whale parts, with restrictions to limit commercial exchange of such products, with the exception of marked and certificated handicrafts, which could be sold domestically. *Id.* ¶¶ 64-66.

Overall, NMFS's hunt proposal incorporates multiple levels of conservatism, including:

- waiver period only 10 years; hunt permits maximum 5/3 years;
- NMFS convenes teams to evaluate hunt effectiveness, safety, and humaneness after eight whales are struck;
- PCFG strike limits/low-abundance (stop-hunt) triggers;
- PCFG forecasting model to account for potential lag in abundance estimates;
- assumption that unidentified whales struck/approached during odd-year hunts are all PCFG whales (current estimate is 48% PCFG);
- two struck whales but only one landed whale allowed during odd-year hunts (creating possibility for a single strike);
- assumption that all struck whales die;
- no training harpoon throws during the migration season of odd-numbered years (to reduce risk to WNP gray whales);
- limit of one whale struck within a 24-hour period during even-year hunts;
- cease-hunt requirement after a whale is landed in even-year hunts until the whale is identified.

*Id.* ¶¶ 28-29, 35, 39-41, 54, 56, 58-59, 61, 70. As discussed above, surveys of the ENP and WNP stocks and the PCFG are conducted regularly, ensuring that hunt management is continually informed by robust scientific data.

### **3. International Whaling Commission**

The United States is a signatory to the International Convention for the Regulation of Whaling (“ICRW”), which established the International Whaling Commission (“IWC”). *Id.* ¶ 15. Since 1997, the IWC has endorsed an allocation of ENP gray whales for aboriginal subsistence hunting. *Id.* ¶ 20. The allocation is shared between the Russian Federation, for use by Chukotkan natives, and the United States, for use by the Makah Tribe. *Id.* The United States has routinely transferred its unused quota to the Russian Federation, per a bilateral agreement between the two countries. *Id.* ¶ 22. In recent years, Chukotkan hunters have harvested an average of around 128 gray whales per year, and in some years have exceeded their quota. *Id.* ¶¶ 92, 112. Chukotkan hunters have harvested as many as 143 gray whales in a year, and recently, the Russian Federation requested and received an increase in the IWC gray whale quota to meet increased need. *Id.* ¶¶ 21, 112; Tr.-2, at 112 lines 20-21. The current ENP gray whale quota for the period 2019 through 2025 is 980 whales with an annual cap of 140 whales, five of which are allocated to the Makah Tribe annually. *Id.* ¶ 23.

#### **B. Procedural History**

##### **1. Development of the Proposed Waiver and Regulations**

Under the 1855 Treaty of Neah Bay, the Makah Tribe has the right of taking fish and of whaling or sealing at usual and accustomed grounds and stations. NMFS’s Proposed Findings 1. In order to implement their treaty right,<sup>6</sup> in February 2005, the Tribe submitted to NMFS a request for authorization under the MMPA to conduct a ceremonial and subsistence hunt for

---

<sup>6</sup> The Ninth Circuit Court of Appeals previously ruled that notwithstanding the Tribe’s express treaty right, the Tribe must have authorization under the MMPA to carry out a ceremonial and subsistence whale hunt. *Anderson v. Evans*, 371 F.3d 475 (2004).

ENP gray whales in the coastal portion of the Tribe’s usual and accustomed fishing grounds (“U&A”). NMFS’s Proposed Findings ¶¶ 1-3. NMFS has referred to the coastal portion of the Tribe’s U&A as the proposed “hunt area.” *Id.* ¶ 4.

To inform its review of the Tribe’s request, NMFS prepared a draft environmental impact statement (“DEIS”) under the National Environmental Policy Act (“NEPA”),<sup>7</sup> which NMFS released for public comment in May 2008. Yates Decl. ¶ 10; NMFS Ex. 1-5. Subsequently, new scientific information relevant to the Tribe’s request became available, leading NMFS to terminate that NEPA process and undertake scoping for a new DEIS, which NMFS released in March 2015. *See* 77 Fed. Reg. 29,967, 29,968 (2012); Yates Decl. ¶¶ 11-12; Ex. ALJ-006. The 2015 DEIS evaluated the Tribe’s hunt proposal and a number of hunt alternatives. Ex. ALJ-006, Section 2. NMFS received over 57,000 public comments on the 2015 DEIS and considered and responded to all substantive comments. Yates Decl. ¶ 12; Exs. ALJ-007, ALJ-008, ALJ-009.

In developing the hunt proposal, NMFS relied on the expertise of its lead gray whale scientists and managers and other qualified staff members. Yates Decl. ¶ 14. Dr. David Weller, a recognized expert on gray whales and member of the IWC Scientific Committee, provided scientific advice regarding gray whale biology and marine ecology. *See* Weller Decl. ¶¶ 1-5; NMFS Ex. 3-1. Dr. Jeffrey Moore, a recognized expert in cetacean quantitative ecology, population dynamics, and risk assessment and also a member of the IWC Scientific Committee, provided scientific advice regarding gray whale population dynamics and risk assessment models for estimating gray whale abundance, trends, and other demographic parameters and quantifying the potential impact of the proposed hunt on gray whale populations. *See* Moore Decl. ¶¶ 1-7;

---

<sup>7</sup> 42 U.S.C. §§ 4321 *et seq.*

NMFS Ex. 4-1. Dr. Shannon Bettridge, Chief of NMFS’s Marine Mammal and Sea Turtle Conservation Division, NMFS Office of Protected Resources, provided scientific and management advice regarding MMPA stock assessment reports, which contain the best scientific evidence available regarding the status of marine mammal stocks, and about the MMPA’s UME process. *See* Bettridge Decl. ¶¶ 1-3; Third Bettridge Decl. ¶ 1-2; NMFS Ex. 2-1. And Mr. Chris Yates, the NMFS Assistant Regional Administrator for Protected Resources for the NMFS West Coast Region charged with overseeing implementation of the MMPA and Endangered Species Act in the Region, oversaw NMFS’s decision-making regarding the proposed waiver and regulations. Yates Decl. ¶¶ 1-2; NMFS Ex. 1-1.

In May 2017, NMFS submitted an initial waiver decision and draft hunt regulations to the Marine Mammal Commission (“Commission”)<sup>8</sup> for their review. Yates Decl. ¶ 72; NMFS Ex. 1-10. The Commission replied by letter dated July 11, 2017, generally supporting NMFS’s proposal and making recommendations for further consideration. Yates Decl. ¶ 72. The MMC Stated: “The Commission believes that the draft documents lay out a *prima facie* case that the requirements for granting a waiver under the MMPA have been met and recommends that NMFS proceed with issuing a proposed rule and scheduling an administrative hearing . . . .” NMFS Ex. 1-8, at 1. The MMC stated that its primary concern was the need to avoid, to the maximum extent practicable, the accidental taking of WNP gray whales and, secondarily, to avoid taking that could disadvantage the PCFG regardless of whether it is considered a stock. *Id.* The MMC

---

<sup>8</sup> The Commission, established under MMPA § 201, is composed of experts in marine ecology and resource management and, among other duties, provides recommendations to federal officials for the protection and conservation of marine mammals. 16 U.S.C. §§ 1401-02.

stated that the rule proposed by NMFS at that time struck an appropriate balance between the goals of protecting WNP and PCFG whales. NMFS Ex. 1-8, at 2.

Subsequent to NMFS's 2017 consultation with the Commission, NMFS modified the hunt proposal and requested that the Commission consult on the revised approach. Yates Decl. ¶ 74; NMFS Ex. 1-14. The MMC replied by letter dated March 13, 2018, expressing support for the modified proposal. NMFS Ex. 1-15. The Commission's letter stated: "the Commission stands by its earlier comment that the risk of killing or seriously injuring a WNP gray whale appears to be sufficiently low that it should not present an insurmountable obstacle to NMFS moving forward with a proposed regulation to authorize the Makah Tribe to take whales from the [ENP] stock. NMFS Ex. 1-15, at 1. Regarding the PCFG, the Commission stated: "[T]he Commission believes that setting the allowable strike limit at 16 PCFG whales over a ten-year period should provide reasonable certainty that the proposed level of hunting PCFG whales will not have adverse impacts on this 'stock.'" NMFS Ex. 1-15, at 2. NMFS carefully considered the Commission's advice in finalizing the proposed waiver and regulations. NMFS Ex. 1-13.

The IWC, through its Scientific Committee, also thoroughly evaluated the proposed hunting scheme to determine whether it was consistent with the IWC's conservation and management objectives. NMFS's Proposed Findings ¶¶ 17-19, 75. The IWC's conservation objectives are similar to those of the MMPA. *Id.* ¶ 17. The IWC Scientific Committee evaluated NMFS's proposed hunt, as set forth in the proposed waiver and regulations, and determined that it meets all IWC management and conservation objectives. *Id.* ¶ 75. The IWC Scientific Committee's evaluation includes simulation modeling over a 100-year period that accounts for plausible levels of uncertainty regarding a number of factors, including population structure,

abundance and trends, historic and future catch levels, reproduction, survivorship, and environmental conditions. *Id.* ¶ 19.

## 2. Rulemaking Process

MMPA section 103(d) provides that a waiver and regulations are subject to the APA's formal rulemaking requirements. 16 U.S.C. § 1373(d); 5 U.S.C. §§ 553, 555-557. Accordingly, NMFS published notice of an agency hearing before an administrative law judge ("ALJ") and a proposed rule describing the proposed waiver and regulations on April 5, 2019. Exs. ALJ-001 (84 Fed. Reg. 13,639 (2019) (Notice of Hearing)), ALJ-002 (84 Fed. Reg. 13,604 (2019) (Proposed Rule)). The Notice of Hearing announced the procedures applicable to the agency hearing and the opportunity for interested persons to participate and to submit written testimony. Ex. ALJ-001 (84 Fed. Reg. at 13,639); *see* 50 C.F.R. § 228.5. Six groups or individuals submitted notices of intent to participate as parties to the hearing: the Animal Welfare Institute ("AWI")<sup>9</sup>; Peninsula Citizens for the Protection of Whales ("PCPW")<sup>10</sup>; Sea Shepherd Conservation Society and Sea Shepherd Legal ("Sea Shepherd")<sup>11</sup>; The Makah Indian Tribe; the Marine Mammal Commission; and, Ms. Inanna McCarty. Ex. ALJ-010. Ms. McCarty did not subsequently appear or participate in the proceedings. *See* Tr.-1, at 10 lines 13-16.

On May 10, 2019, AWI and Sea Shepherd each filed expedited motions seeking to extend the May 20, 2019 deadline for submission of initial direct testimony and all subsequent deadlines by a minimum of 90 days. *See* ALJ Order Denying Sea Shepherd's and Animal Welfare Institute's Expedited Motions to Extend Waiver Proceeding Schedule, dated May 20, 2019.

---

<sup>9</sup> AWI is a long-time opponent of a Makah tribal hunt. *See* Schubert Decl. ¶¶ 4-8, 49-53.

<sup>10</sup> PCPW does not endorse the killing of any whales. Owens Rebuttal to Yates ¶ 17.

<sup>11</sup> Sea Shepherd opposes the killing of whales by anyone, anywhere, any time. Tr.-5, at 86 lines 16-19.

NMFS and the Tribe both opposed the motions to extend. *Id.* The ALJ denied the motions on grounds that the Tribe had demonstrated it would be prejudiced by the delay, but stated that the movants were not precluded from raising these issues later in the proceedings. *Id.* at 5. The ALJ later agreed to extend the hearing date, scheduled for August 12, 2019, to November 14, 2019 and to extend the deadlines for submission of rebuttal testimony from July 9, 2019 to August 6, 2019.<sup>12</sup> Ex. ALJ-004 (84 Fed. Reg. 37,837 (2019)).

On June 10, 2019, the parties submitted to the court a partial stipulation agreeing to narrow the scope of issues to be addressed at the hearing.<sup>13</sup> Partial Stipulation re Scope of Issues to Be Addressed at the Hearing, dated June 20, 2019. In the partial stipulation, the parties acknowledged that all issues of fact addressed at the hearing should relate to whether the proposed waiver and regulations comply with applicable MMPA requirements. *Id.* § 1. The parties further agreed that the waiver process was not the appropriate vehicle for identifying or challenging the identification of stocks under the MMPA. *Id.* § 2(a). Finally, the parties agreed that the hearing would not be used to challenge the manner of taking and whether such manner of taking were “humane”<sup>14</sup> or would pose a risk to public safety, and that instead those issues would be addressed through the subsequent permitting process. *Id.* § 2(b).

An in-person prehearing conference was held June 17, 2019 and telephonic prehearing conferences to address hearing management were held on July 24, 2019 and September 30, 2019.

---

<sup>12</sup> Notwithstanding the hearing date extension from August 12 to November 14, AWI has continued to maintain that it did not have sufficient time to prepare its case. *See, e.g.*, Tr.-4, at 42 lines 9-25 to 43 line 1. The hearing date was in fact rescheduled to a date later than the date to which AWI had requested that it be postponed. *See Expedited Mot. to Extend Waiver Proceeding Schedule*, dated May 10, 2019, at 2 (AWI) (requesting extension of hearing date to Nov. 12, 2019).

<sup>13</sup> All of the parties except Inanna McCarty signed onto the partial stipulation.

<sup>14</sup> Under the MMPA, before issuing a permit authorizing take, NMFS must determine that the manner of taking will be humane. 16 U.S.C. § 1374(b)(2)(B). The MMPA defines “humane” as “that method of taking which involves the least possible degree of pain and suffering practicable to the mammal involved.” 16 U.S.C. § 1362(4).

The ALJ issued a preliminary determination of issues of fact that would be addressed at the hearing on June 10, 2019 and published a final agenda on June 26, 2019. Ex. ALJ-003 (84 Fed. Reg. 30,088 (2019)). The final agenda included one new issue of fact that had not been included NMFS's Notice of Hearing, relating to the 2019 UME, which was declared at the end of May 2019, after the notice of hearing and proposed rule were published. *Id.*

On October 28, 2019, NMFS submitted a motion requesting that the ALJ recommend certain modifications to the proposed regulations in the recommended decision. NMFS's Mot. Requesting Revisions to Proposed Regulations, dated Oct. 28, 2019. NMFS's proposed modifications would allow the Tribe greater latitude in the use of edible gray whale products at the residences of tribal members who reside off the reservation rather than restricting such use to on-reservation residences. *Id.* NMFS also proposed modifications to clarify certain terms in the proposed regulations. *Id.* No party opposed the motion.

On August 9, 2019 and August 16, 2019 the parties filed motions in limine on various issues. The ALJ ruled on the motions in limine on October 9, 2019. Order Granting in Part and Denying in Part Motions in Limine and Requests to Modify the Final Agenda. The ALJ's order modified some of the issues of fact previously identified, but largely denied the requests to remove issues from the hearing agenda, on grounds that the ALJ was charged with developing a full hearing record, and noting that the parties could re-urge any objections regarding the scope of testimony after the hearing. *Id.* On November 4, 2019, the ALJ published an updated Final Hearing Agenda. Ex. ALJ-005 (84 Fed. Reg. 59,360 (2019)). A six-day hearing was then held, beginning November 14, 2019 and ending November 21, 2019. At the close of the hearing, the ALJ established a deadline of 45 days from the date of the hearing transcript for written comments from interested persons on the proposed waiver and regulations and for post-hearing

briefs and proposed findings and conclusions. Tr.-6, at 16-17. The 45-day public comment period closed March 16, 2020.<sup>15</sup> The matter is now awaiting the ALJ's recommended decision, after which time the ALJ will transmit the record to the NMFS Assistant Administrator for final decision-making. *See* 50 C.F.R. § 228.20(a).

### III. STATEMENT OF LAW

#### A. MMPA Requirements

##### 1. Substantive Requirements for Waiver

This proceeding arises under the MMPA, which imposes a general moratorium on the “take”<sup>16</sup> of any marine mammal but includes a number of exemptions and exceptions. *See* 16 U.S.C. § 1371. One exception allows the Secretary of Commerce,<sup>17</sup> who has delegated authority to NMFS, to waive the moratorium from time to time to allow taking from a species or stock of marine mammals (MMPA § 101(a)(3)(A)), adopt suitable regulations governing the take

---

<sup>15</sup> Several of the comments submitted reference information that is outside the scope of the hearing record. The procedural regulations provide that, at this phase of the proceeding, all public comments be “based upon the record and cit[e] where practicable the relevant page or pages of the transcript.” 50 CFR 228.19(b). Based upon an initial review of the comments, NMFS identifies the following comments that appear to exceed the scope of 50 C.F.R. § 228.19(b):

- (1) NOAA-NMFS-2019-0037-0051 (Comment from Sophie Zielke), at 6-8;
- (2) NOAA-NMFS-2019-0037-0064 (Comment from Erin Gless), at 1;
- (3) NOAA-NMFS-2019-0037-0157 (Comment from Patricia Tietz), at 1;
- (4) NOAA-NMFS-2019-0037-0168 with attachments (Comment from Y. Alaniz), Attachments 1, 2-4, 6-8;
- (5) NOAA-NMFS-2019-0037-0170 with attachment (Comment from Donald Baur, Perkins Coie);
- (6) NOAA-NMFS-2019-0037-0176 with attachment (Comment from Anonymous Anonymous [Pacific Rim Association of Tour Operators]), Attachment at 2-3;
- (7) NOAA-NMFS-2019-0037-0184 with attachments (Comment from DJ Schubert, Animal Welfare Institute), Attachment 1 at 1, 2-10, 20 and Attachment 2;
- (8) NOAA-NMFS-2019-0037-0187 with attachments (Comment from DJ Schubert, Animal Welfare Institute), Attachments 2-8; and
- (9) NOAA-NMFS-2019-0037-0190 with attachment (Comment from Jim Darling), at 11-12.

<sup>16</sup> Under the MMPA, “‘take’ means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.” 16 U.S.C. § 1362(13).

<sup>17</sup> The Secretary of Interior also administers the MMPA with respect to certain species of marine mammals. *See* 16 U.S.C. § 1362(12).

(MMPA § 103), and issue permits authorizing the take (MMPA § 104). *See* 16 U.S.C. §§ 1371(a)(3)(A), 1373, 1374; Ex. ALJ-002 (84 Fed. Reg. 13,604, 13,611-15 (2019)).

Under MMPA section 101(a)(3)(A), any decision by NMFS to issue a waiver must: be based on the best scientific evidence available; be made in consultation with the Marine Mammal Commission; and, have due regard to the distribution, abundance, breeding habits, and times and lines of migratory movements of the marine mammal stock subject to the waiver. 16 U.S.C. § 1371(a)(3)(A). Additionally, NMFS must “be assured” that the taking is “in accord with sound principles of resource protection and conservation as provided in the purposes and policies of the MMPA.” *Id.* The MMPA’s purposes and policies include maintaining marine mammals as a significant functioning element of their ecosystem, maintaining the health and stability of the marine ecosystem, and managing stocks to attain or maintain their OSP levels, keeping in mind the carrying capacity of their habitat. 16 U.S.C. § 1361.

When issuing a waiver, NMFS must also adopt regulations governing the take of the affected species or stock. 16 U.S.C. § 1371(a)(3)(A). The requirements for regulations are set forth in MMPA section 103, which provides:

[NMFS], on the basis of the best scientific evidence available and in consultation with the Marine Mammal Commission, shall prescribe such regulations with respect to the taking . . . of animals from each species of marine mammal (including regulations on the taking . . . of individuals within population stocks) as [NMFS] deems necessary and appropriate to insure that such taking will not be to the disadvantage of those species and population stocks and will be consistent with the purposes and policies [of the MMPA].

16 U.S.C. § 1373(a). NMFS interprets “disadvantage” in relation to the impact of the take on the stock’s OSP level. *See e.g.*, 45 Fed. Reg. 72,178, 72,185 (Oct. 31, 1980); *see also* 44 Fed. Reg. 2,547, 2,549 n.3 (1979) (“[D]isadvantaged’ refers to species or populations stocks below or

above OSP or subject to conditions that do not preserve the purposes and policies of the Act or do not maintain optimum sustainable population and a healthy ecosystem.”).

In prescribing regulations, NMFS must:

give full consideration to all factors which may affect the extent to which such animals may be taken . . . , including but not limited to the effect of such regulations on—

- (1) existing and future levels of marine mammal species and population stocks;
- (2) existing international treaty and agreement obligations of the United States;
- (3) the marine ecosystem and related environmental considerations;
- (4) the conservation, development, and utilization of fishery resources; and
- (5) the economic and technological feasibility of implementation.

16 U.S.C. § 1373(b). Section 103 also includes a non-exclusive list of restrictions that regulations may include, such as the number of animals to be taken in any year, the season or time when they may be taken, and the manner and location of the taking. 16 U.S.C. § 1373(c).

A waiver and regulations do not, standing alone, allow any take of marine mammals. A person or entity eligible under the regulations must apply for a permit to authorize any taking. The permit process is subsequent to and separate from the waiver process and is governed by section 104 of the MMPA, which authorizes NMFS to establish procedures for permit applications and processing. *See* 16 U.S.C. § 1374. Permits must be consistent with the applicable regulations established under section 103 and must specify:

- (A) the number and kind of animals which are authorized to be taken . . . ,
- (B) the location and manner (which manner must be determined by [NMFS] to be humane) in which they may be taken . . . ,
- (C) the period during which the permit is valid, and
- (D) any other terms or conditions which [NMFS] deems appropriate.

16 U.S.C. § 1374(b)(2). NMFS must publish in the *Federal Register* notice of all permit applications and provide a 30-day comment period. 16 U.S.C. § 1374(d)(2). The permit applicant bears the burden of demonstrating that the take for which authorization is sought will

be consistent with the MMPA's purposes and policies. 16 U.S.C. § 1374(d)(3). Permit terms and conditions may be challenged in federal court. *Id.* § 1374(d)(6).

## **2. Procedural Requirements for Waiver**

A decision to issue a waiver and adopt regulations must be made on the record after opportunity for an agency hearing. 16 U.S.C. § 1373(d). The agency hearing is governed by procedures set forth in MMPA section 103(d), the APA, and NMFS's hearing regulations at 50 C.F.R. part 228. Pursuant to NMFS's regulations, after the agency hearing, the presiding officer or ALJ "shall make a recommended decision based on the record and transmit the decision to the Assistant Administrator." 50 C.F.R. § 228.20(a)-(b). The Assistant Administrator then publishes notice of receipt of the recommended decision in the *Federal Register* and provides opportunities for the parties to the hearing and any other interested persons to submit written comments. 50 C.F.R. § 228.20(c)-(d). After close of the comment period, the Assistant Administrator makes a final decision on the proposed waiver and regulations. 50 C.F.R. § 228.21(a)-(b). The Assistant Administrator's decision "may affirm, modify, or set aside, in whole or in part, the recommended findings, conclusions and decision of the presiding officer [or ALJ]." 50 C.F.R. § 228.21(a). The Assistant Administrator may also remand the matter to the ALJ for further factual development. 50 C.F.R. § 228.21(a). The agency's final decision, along with the final regulations, if any, are then published in the *Federal Register*. 50 C.F.R. § 228.21(b)(4).

## **B. Evidentiary Standards**

Under the APA, "[a] sanction may not be imposed or rule or order issued except on consideration of the whole record or those parts thereof cited by a party and supported by and in accordance with the reliable, probative, and substantial evidence." 5 U.S.C. § 556(d). The ALJ

has an “affirmative duty to qualify evidence as ‘reliable, probative, and substantial’ before relying upon it.” *U.S. Steel Min. Co., Inc. v. Director, Office of Workers’ Compensation Programs*, 187 F.3d 384, 389 (4<sup>th</sup> Cir. 1999). “Speculation is, of course, no substitute for evidence, and [an agency] decision based on speculation is not supported by substantial evidence.” *Id.* (citing *White v. Apfel*, 167 F.3d 369, 375 (7<sup>th</sup> Cir. 1999) (additional citations omitted)).

As the Supreme Court has observed, in enacting section 556(d) of the APA, Congress was “primarily concerned with the elimination of agency decision-making premised on evidence which was of poor quality—irrelevant, immaterial, unreliable, and nonprobative—and of insufficient quantity.” *Steadman v. SEC*, 450 U.S. 91, 102 (1981) (citations omitted).

“Substantial evidence is more than a scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Consolidated Edison Co. of New York v. National Labor Relations Bd.*, 305 U.S. 197, 217 (1938) (citations omitted). This means something less than the weight of the evidence, and the possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency’s finding from being supported by substantial evidence. *National Labor Relations Bd. v. Nevada Consolidated Copper Corp.*, 316 U.S. 105, 106 (1942).

Also, under the MMPA, NMFS’s decision-making, and therefore the ALJ’s recommended decision, must be based on the “best scientific evidence available.” 16 U.S.C. §§ 1731(a)(3)(A), 1373(a). This standard does not require scientific certainty. *See* 44 Fed. Reg. 2,547, 2,550 (1979); *Friends of Animals, Inc. v. Baldrige*, 1982 U.S. Dist. LEXIS 18171, at \*13 (D.D.C. 1982) (MMPA’s “best scientific evidence available” standard is satisfied if the weight of authority suggests a certain marine mammal stock abundance estimate is more reasonable or

likely). But it does require that the agency not base its decisions on “speculation or surmise.” *See Bennett v. Spear*, 520 U.S. 154, 176-77 (1997) (interpreting Endangered Species Act’s analogous “best scientific and commercial data available” standard). This standard does not require an agency to conduct new tests or make decisions on data that do not yet exist, but does require that the agency not disregard scientific evidence that is in some way better than that on which it relied. *San Luis & Delta-Mendota Water Authority v. Locke*, 776 F.3d 971, 995 (9th Cir. 2014) (interpreting ESA).

As the proponent of the proposed waiver and regulations, NMFS bears the burden of proving that the applicable standards are met. 5 U.S.C. § 556(d). However, NMFS’s determination of what information constitutes the best scientific information available is itself a scientific determination deserving of deference. *San Luis & Delta-Mendota Water Authority*, 776 F.3d at 995 (citing *Miccosukee Tribe of Indians of Fla. v. United States*, 566 F.3d 1257, 1265 (11th Cir. 2009)).

#### **IV. ARGUMENT**

##### **A. NMFS’s Proposed Waiver Meets All Applicable Legal Standards**

Per the discussion above, NMFS’s decision to issue a waiver must be based on the best scientific evidence available, be made in consultation with the Commission, and have due regard to the distribution, abundance, breeding habits, and migratory movements of the stock subject to the waiver. 16 U.S.C. § 1371(a)(3)(A); Section III.A.1, *supra*. Also, NMFS must be assured that the taking is consistent with the MMPA’s purposes and policies. *Id.* The proposed waiver meets all of these requirements.

##### **1. The Proposed Waiver Is Based on the Best Scientific Evidence Available and Was Made in Consultation with the MMC**

The world’s leading experts on gray whales at NMFS, the IWC, and the Commission have all reviewed the proposed Makah hunt, as set forth in the proposed waiver and regulations, and determined that it is consistent with the best available scientific evidence. NMFS’s Proposed Findings ¶¶ 72-75. No party to this proceeding has seriously questioned the quality of the science upon which NMFS has relied or the qualifications of NMFS’s, the IWC’s, and the Commission’s experts. *See, e.g.*, Tr.-4, at 43, lines 11-12 (“AWI has great respect for the work of the Scientific Committee. . . .”).<sup>18</sup> No party has identified any material scientific evidence that NMFS failed to consider. Accordingly, NMFS has complied with the MMPA’s requirement to rely on the best scientific evidence available. NMFS’s Proposed Findings ¶¶ 26-27 (NMFS’s determination that the proposed waiver and regulations were based on the best scientific evidence available); *San Luis & Delta-Mendota Water Authority*, 776 F.3d at 995 (agency’s determination of what information constitutes the best scientific information available is deserving of deference); *Building Indus. Ass’n v. Norton*, 247 F.3d 1241, 1246-47 (D.C. Cir. 2001) (appellants failed to show that agency decision violated “best scientific data” standard where they failed to point to any data that was omitted from consideration).

Moreover, although the “best scientific evidence available” standard focuses on *available* data and does not demand certainty, *see* 44 Fed. Reg. at 2550; *Building Indus. Ass’n*, 247 F.3d at

---

<sup>18</sup> AWI’s expert Mr. Schubert testified as follows about the Scientific Committee’s review: “[I]t’s clear that they were conservative in how they constructed many elements of that model. But whether or not it captures everything that I think should be captured is not clear to me, simply because I haven’t had enough time to really delve into it.” Tr.-4, at 43 lines 11-25 to 44 lines 1-16. He also stated, when asked whether he disagrees with the Commission’s advice, “I would just restate what I said before that I think it’s more complicated than anybody makes it out to be. And I don’t know what the Marine Mammal Commission considered . . .” Tr.-4, at 45 lines 3-11. Absent any specific disagreement with the analyses of the IWC and Commission or showing that they omitted or misinterpreted relevant information, Mr. Schubert’s apparent lack of agreement with these expert bodies is irrelevant. *See* 5 U.S.C. § 556(d) (formal rulemaking must be based on “reliable, probative, and substantial evidence.”); *Building Indus. Ass’n*, 247 F.3d at 1246-47.

1246, here, the marine mammals at issue are extremely well-studied, providing additional assurance that the proposed waiver and regulations are robust and conservative. *See* Tr.-1, at 30 lines 12 (ENP stock “is one of the best studied marine mammal populations in the world”); Tr.-2, at 106 lines 18-23 (gray whale science is “very advanced”; “[W]e have a terrific data set for both the Western North Pacific stock, the Eastern North Pacific stock and then the feeding group in the Pacific Coast Feeding area.”). NMFS has a long time-series of data for the ENP stock, the PCFG, and the WNP stock, and all of these groups are regularly surveyed. NMFS’s Proposed Findings ¶¶ 77, 121, 174. NMFS has complied with the requirement to base its decisions on the best scientific evidence available.

NMFS also complied with the requirement to consult with the Commission in preparing the proposed waiver and regulations. NMFS sought the Commission’s advice on both its initial and revised hunt proposals and carefully considered the Commission’s advice, as well as the Commission’s comments on the 2015 DEIS. NMFS’s Findings ¶¶ 72-74; NMFS Ex. 1-11; Ex. ALJ-002 (84 Fed. Reg. at 13,611). The Commission stated: “Our overall impression is that the draft regulations are based on the best available science and are appropriately precautionary.” NMFS Ex. 1-8. NMFS has satisfied the MMPA requirement to consult with the MMC.

**2. NMFS Gave Due Regard to the Distribution, Abundance, Breeding Habits, and Times and Lines of Migratory Movements of the ENP Gray Whale Stock**

The requirement that an agency give “due regard” to certain considerations calls for the exercise of discretion by the agency, with the purposes of the governing act in mind. *See Opp Cotton Mills, Inc. v. Administrator of Wage and Hour Div. of Dep’t of Labor*, 312 U.S. 126, 151 (1941); *Jeffries v. Olesen*, 121 F. Supp. 463, 475 (S.D. Cal. 1954) (“due regard” standard depends on “reason and common sense and the circumstances of the case”). NMFS satisfied the MMPA requirement to give due regard to the distribution, abundance, breeding habits, and

migratory movements of the ENP gray whale stock by thoroughly evaluating the potential effects of the proposed waiver and designing the proposed regulations to minimize adverse effects to the ENP stock, consistent with the MMPA's purposes and policies.

**a. Distribution and Abundance**

The record reflects that NMFS thoroughly considered potential effects of the proposed waiver on the ENP stock's distribution, particularly focusing on distribution within the PCFG range and the hunt area. NMFS's Proposed Findings ¶¶ 114-140. As explained above, the proposed waiver, at a maximum, could result in the removal of 25 whales over 10 years (average 2.5/year) out of a population most recently estimated to number nearly 27,000 whales. *Id.* ¶ 36; *see* Tr.-1, at 17 lines 2-3 (Yates testimony that the "Eastern North Pacific stock of gray whales is a very healthy population."). Even considering the 2019 ENP gray whale UME, it is improbable that the removal of such a small fraction of a percentage of the stock's abundance would be detectable. NMFS's Proposed Findings ¶¶ 109-110; *see id.* ¶ 103 (for ENP abundance to fall below OSP, abundance would have to drop by around 40 percent); NMFS's Proposed Findings ¶ 92 (current PBR for the ENP stock is 801, human-caused mortality estimated at 139).

NMFS also fully considered whether non-lethal hunt activities (*e.g.*, unsuccessful strike attempts, training harpoon throws, and approaches) would cause affected whales to abandon the hunt area and thereby affect the distribution of whales. *Id.* ¶¶ 130-140. Based on the research of NMFS's scientists and the best available scientific literature, NMFS concluded that whales exposed to non-lethal hunt activities might display temporary responses but would not be affected long-term. *Id.*; Tr.-2, at 10-11, 14; Tr.-2, at 13 lines 20-23 ("Whales can easily move away from the point of disturbance, they are incredibly tuned into the acoustic of an environment that they live in and they can easily move.") (testimony of Dr. Weller); *see also* NMFS Ex. 1-15,

at 2-3 (Commission advice that “the Commission believes that approaches and attempted strikes would have far less severe and more transitory impacts on gray whales than striking or killing.”).

The proposed waiver and regulations give particular regard to the PCFG, in order to ensure that the hunt does not affect the abundance or distribution of the ENP stock within the PCFG range. *Id.* ¶¶ 114-140. As explained above, the hunt proposal includes a number of conservative measures to manage impacts to the PCFG and thereby maintain ENP range-wide distribution. Section II.A.2, *supra*. Approximately four new ENP gray whales recruit into the PCFG each year, along with four PCFG whales, which is more than the number of removals that could occur under the proposed waiver. NMFS’s Proposed Findings ¶ 127. Given these protective measures and the fact that PCFG whales move widely within and beyond their defined range, NMFS determined that the proposed hunt would not have a detectable effect on the PCFG. NMFS’s Proposed Findings ¶ 140; Tr.-2, at 5-7 (testimony of Dr. Weller); Tr.-2, at 14, lines 9-10; *see also* Tr.-2, at 128, lines 4-5 (Dr. Moore discussing PCFG low-abundance triggers: “I can’t see a more failsafe approach, to be honest.”). The IWC Scientific Committee and Marine Mammal Commission likewise determined that the proposed hunt was sufficiently precautionary as to avoid any adverse effects to the PCFG NMFS’s Proposed Findings ¶¶ 72-75; *see* NMFS Ex. 1-15, at 2 (“[T]he Commission believes that setting the allowable strike limit at 16 PCFG whales over a ten-year period should provide reasonable certainty that the proposed level of hunting PCFG whales will not have adverse impacts on this ‘stock.’”).

In determining that the proposed hunt would not have a detectable effect on ENP or PCFG abundance or distribution, NMFS’s experts fully considered the ongoing effects of climate change and human disturbances within the ENP stock’s range. NMFS’s Proposed Findings ¶¶ 84-90, 94-99, 106-08, 123, 125. The ENP stock has thrived throughout the same time period that

climate change and human activities have been occurring. *Id.* The PCFG increased in abundance during 2013-2015, when the warm-water “blob” was affecting the Pacific coast. *Id.* ¶ 123.

While some of the whaling opponent parties to this proceeding have suggested dire effects on the ENP stock and PCFG due to climate change and cumulative effects,<sup>19</sup> as explained by Dr. Weller:

So there is climate change impacts in the Arctic. We are watching what is happening with population dynamics. But in that same time that the Arctic has been changing and that’s over several decades, it’s not anything that’s just you, know, overnight, it’s several decades.

It’s hard to reconcile an impact with a population that has grown significantly and high calf production. What those two things mean to me is that the food availability in the Arctic [sic] is high and good and it allows the population to sustain itself. And not only that but to grow and to be putting out, to have reproductive output that is very high.

Tr.-2, at 29 lines 12-24; *id.* at 32 lines 18-21 (“[P]opulation dynamics an increasing population and a high calf production is really what I defer to as the scientific information that we have to suggest that [climate change is] not an issue.”). No party has put forth probative evidence disputing Dr. Weller’s conclusions.

Furthermore, it is likely that the net effect to ENP gray whale abundance would be the same with or without a Makah tribal hunt. As explained above, the United States has routinely

---

<sup>19</sup> AWI’s witness, Mr. Schubert, devoted most of his testimony to arguing that climate change, cumulative effects of other human activities, and the 2019 UME would have unknown dire consequences for gray whales. *See* Schubert Decl. ¶¶ 26-30, 38, 41. Mr. Schubert presents no evidence supporting his opinions. For example, he asserted in his written testimony that the timing in ENP stock’s southbound migration has changed over time, causing a one-week delay in the southbound migration, which could adversely impact gray whales. Schubert Decl. ¶¶ 21-22. As explained in Dr. Weller’s testimony, the one-week delay actually occurred in the 1980s, subsequent to which the ENP stock grew to the largest abundance estimate ever recorded. NMFS’s Proposed Findings ¶ 84. Also, in his written testimony Mr. Schubert asserted that the ENP stock’s carrying capacity is being reduced due to warming in the Arctic, but at the hearing acknowledged that in fact carrying capacity may have remained the same, gone up, or gone down over the past 20 years, and that he had not submitted any scientific support for his carrying-capacity theory. *Compare* Schubert Decl. ¶ 26, with Tr.-4, at 75-76.

transferred its unused IWC quota for ENP gray whales to the Russian Federation, and Chukotkan hunters have used and at times exceeded the quota. NMFS’s Proposed Findings ¶ 22, 112.

While it cannot be known with certainty that Chukotkan natives would harvest the entire available quota of 140 ENP gray whales per year in the absence of a Makah hunt, they have harvested as many as 143 whales in a year. *Id.* ¶ 112-113. The above discussion, the information provided in NMFS’s Proposed Findings, and the hearing record, provide substantial evidence demonstrating that NMFS gave “due regard” to ENP gray whale distribution and abundance in preparing the proposed waiver and regulations. *See Opp Cotton Mills, Inc.*, 312 U.S. at 151 (“due regard” standard requires exercise of agency discretion and depends on reason, common sense, and the circumstances of the case); *Consolidated Edison Co. of New York*, 305 U.S. at 217 (substantial evidence standard satisfied where agency adduces “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion”).

**(i) The Whaling Opponent Parties Have Not Offered Probative Evidence Demonstrating that the Proposed Waiver Would Adversely Affect Distribution or Abundance**

The whaling-opponent parties’ testimony against issuance of the waiver focuses primarily on NMFS’s analysis of non-lethal hunt effects and PCFG population dynamics and site fidelity. With respect to non-lethal hunt impacts, Sea Shepherd presented the testimony of Ms. Carrie Newell, a “citizen scientist,” retired professor, and whale-watching guide working out of Depoe Bay, Oregon. Tr.-5, at 95 lines 2-3; Tr.-4, at 109, 113. She testified primarily about her personal experience observing gray whales in Depoe Bay: “I am by no means an expert, you know, in the rest of the range . . . .”). Tr.-5, at 15 lines 14-15.<sup>20</sup> Ms. Newell testified that a PCFG whale she

---

<sup>20</sup> Ms. Newell has published one peer-reviewed paper on gray whales. Tr.-4, at 112 lines 9-11. She stated that she prepared her written testimony for this matter “off the top of my head.” Tr.-4, at 185 lines 9-12.

nicknamed “Ginger” was regularly sighted in Depoe Bay, Oregon, until an encounter with a research vessel collecting fecal samples. Declaration of Carrie Newell (Aug. 6, 2019) ¶¶ 22-23. Ms. Newell asserts that this encounter caused “Ginger” to dramatically change her behavior, and that Ginger never again returned to the same location, but was subsequently located feeding eight miles away. *Id.* Based on this incident and her observational experience, Ms. Newell disagrees with Dr. Weller’s professional opinion that non-lethal hunt activities will not have lasting effects on gray whale health or behaviors.<sup>21</sup> Newell Decl. ¶¶ 22-24 (referring to Weller Decl. ¶ 50).

Ms. Newell’s testimony that she observed an individual gray whale moving away from a disturbance and feeding elsewhere does not demonstrate that the whale suffered long-term consequences or was permanently displaced in a manner that would affect PCFG distribution.<sup>22</sup> *See e.g.* Tr.-4, at 201 lines 2-3 (testimony of Ms. Newell acknowledging that Ginger’s behavior shows her ability to move away from a disturbance). She does not reconcile her testimony with the data showing that more intensive hunting by Chukotkan natives has not altered gray whale distribution in their hunt area,<sup>23</sup> and that gray whales exposed to seismic surveys, “the loudest

---

<sup>21</sup> Ms. Newell also asserted that a whale subjected to an unsuccessful strike attempt could die from stress, but did not offer any scientific evidence to support this theory. *See* Tr.-4, at 176 lines 8-10 (“[Y]ou know, maybe there’s a strike, not a kill, but a strike. Scared the whale. You know, and then they go off, and later they die.”)

<sup>22</sup> Ms. Newell also asserted in her written testimony that some whales subjected to biopsying left the area and “never returned.” Newell Decl. ¶ 24. On the witness stand, Ms. Newell acknowledged that the whales she asserted had never returned could in fact have come back the following season or may have been transient (non-PCFG) whales. Tr.-4, at 203-04. She further acknowledged that some whales utilize the PCFG for several years and are never seen again for unknown reasons, positing: “You know, I haven’t seen this whale for 5 years in Depoe Bay. Did it die? Is it just gone? Or did it decide, I have a new preference that – just a locality that I want to go to? So I can’t say? I don’t know if they died. I would need to really get more data on that.”

<sup>23</sup> Sea Shepherd and AWI questioned at the hearing whether the studies evaluating the effects of the Chukotkan hunt document “the same individual whales returning.” *See, e.g.,* Tr.-2, at 70 lines 7-9; Villegas-Amtmann Decl. ¶ 7. This line of questioning is irrelevant. The issues here concern population-level effects to gray whale stocks, not effects to individual whales. 16 U.S.C. § 1371, 1373 (waiver and regulations apply at the stock level); *compare* Tr.-2, at 85 lines 18-19 (testimony of Dr. Weller: “[M]y job as a scientist is to look at this from a population level not at the individual level.”), *with* Tr.-4, at 35 lines 20-23 (testimony of Mr. Schubert: “[M]y professors did their best to convince me that you must look at things at the population level. I never bought into that.”).

sounds made on earth,” remain in the area and return year after year. Tr.-2, at 72 lines 12-21 (testimony of Dr. Weller: “[T]he distribution may shift within a small area [in response to seismic surveys], but generally also remains the same.”). Nor does Ms. Newell reconcile her theories with the data showing that PCFG abundance has been stable or increasing for more than a decade despite ongoing human disturbance. *See* NMFS’s Proposed Findings ¶¶ 85-87, 122-123, 125; Tr.-4, at 197 (Ms. Newell’s testimony stating that whales are present in Depoe Bay year after year despite human-caused disturbance from whale watching and fishing operations); *id.* at 199. In short, Ms. Newell’s testimony does not meet the “best available” or “substantial” evidence standards. *See Bennet*, 520 U.S. at 176 (under best-available-science standard, agency decision cannot rely on surmise).

The testimony of Sea Shepherd’s other witness, Dr. Stella Villegas-Amtmann,<sup>24</sup> likewise does not connect non-lethal disturbance of gray whales to population-level effects. Dr. Villegas-Amtmann’s testimony centers on her work on gray whale bioenergetics modeling. Declaration of Dr. Stella Villegas-Amtmann, PHD (Aug. 6, 2019) ¶ 4. While Dr. Villegas-Amtmann *et al.*’s published research on these models is considered thorough and comprehensive, it does not translate disturbance and any associated behavioral modifications to impacts on gray whale energy budgets, as the authors of the work themselves acknowledge. Tr.-2, at 132-133 (testimony of Dr. Moore: “So in the case of gray whales we can say that certain activities might translate into the whales doing this or that. But we don’t really know how this or that translates into energy loss or how, the extent to which animals are able to compensate for that.”). Dr. Villegas-Amtmann agreed that her models do not make any predictions about what kind of

---

<sup>24</sup> Dr. Villegas-Amtmann testified as an advocate for gray whales. Tr.-5, at 137 lines 1-3.

energy loss the proposed hunt would have on whales subjected to non-lethal hunt activities, and that disturbed whales may be able to account for any energy loss by additional foraging. Tr.-5, at 161 lines 16-25; *id.* at 167 lines 11-15; *id.* at 168 lines 18-25 to 169 lines 1-13; *id.* at 175 lines 6-17.

As with Ms. Newell’s testimony, Dr. Villegas-Amtmann’s testimony does not reconcile the alleged adverse effects of disturbance-caused energy loss with the ENP stock’s abundance trends over the past decades. *See* Tr.-5, at 147 lines 18-21 (testimony of Dr. Villegas-Amtmann acknowledging data that ENP stock has nearly doubled in size despite whatever energy loss the ongoing Chukotkan hunts have caused). Although her conceptual modeling framework may be scientifically sound, the inferences she draws from the model regarding effects of the proposed hunt on gray whales are speculative. *See e.g.*, Villegas-Amtmann Decl. ¶¶ 6, 9, 10, 12. (asserting that gray whales subjected to disturbance “could” experience energy loss, which “could” influence the whales’ survival; that the reason gray whales do not abandon the Chukotkan hunt area “might” be a question of whether they can afford the extra energy to change their distribution; that a four percent energy loss in a migrating whale “could” cause it to not reproduce that year; and that an increase in a whale’s breathing rate “could” have biologically significant consequences); Tr.-5, at 204 lines 9-17 (testimony of Dr. Villegas-Amtmann, agreeing that her statement that energy loss to a PCFG whale would be the same as for a pregnant ENP gray whales is “speculation”); Tr.-2, at 135 lines 18-22 (testimony of Dr. Moore that “in terms of being able to make direct inference about what the impacts are of particular activities, or particular behavioral modifications on gray whale population dynamics, . . . we haven’t learned a whole lot from [Dr. Villegas-Amtmann’s] work on that.”). Because speculation meets neither the “best scientific evidence available” standard nor the “substantial

evidence” standard, Dr. Villegas-Amtmann’s testimony is not probative here. *See Bennet*, 520 U.S. at 176; *U.S. Steel Min. Co., Inc.* 187 F.3d at 389 (speculation is, of course, no substitute for evidence).

Several of the whaling opponent parties also contest NMFS’s conclusions that recruitment into the PCFG is approximately equal, that is, 50 percent of new recruits are calves born to PCFG mothers, and 50 percent are new ENP gray whales. *See* NMFS’s Proposed Findings ¶ 116. However, their witnesses do not offer specific evidence to support their disagreement. Ms. Newell states:

Now I am fairly confident, but again, I can’t – I don’t have the data to back me up yet. But I would, I would bet lots of money on this, that most of the recruitment comes internally . . . .

Tr.-4, at 170 lines 22-25; *see also* Tr.-5, at 15-16 (Ms. Newell’s testimony expressing her “gut feeling” that recruitment is more internal than external). Mr. Schubert also believes that internal recruitment is higher than external recruitment, referencing a 2017 study. Declaration of DJ Schubert (May 20, 2019) ¶ 38 (citing AWI Ex. 24); Tr.-4, at 97 lines 6-7. The 2017 paper cited by Mr. Schubert does not compare levels of internal and external recruitment. Second Weller Decl. ¶ 15; *see* AWI Ex. 24. Rather, the cited paper reviews photo-identification data and found PCFG whales often migrate together, and that such behavior ““raises the potential these animals associate on winter breeding grounds as well.”” Second Weller Decl. ¶ 15 (citing AWI Ex. 24, at 2). As explained by Dr. Weller:

I think the discussion in the article is inconclusive and the authors say that themselves. And it may simply be an artifact of increased awareness and an increased effort to try and detect and record calves with their mothers. It may also represent an increase in the number of reproductive females that are having calves.

Tr.-2, at 23 lines 14-20.<sup>25</sup> Again, Ms. Newell’s gut feeling and Mr. Schubert’s unfounded inference do not meet the governing evidentiary standards. 5 U.S.C. § 556(d) (agency decision must be supported by reliable, probative, and substantial evidence); *U.S. Steel Min. Co., Inc.*, 187 F.3d at 389 (speculation is not substantial evidence).

Finally, Sea Shepherd disputes the evidence showing that PCFG whales range widely throughout the summer feeding area and do not show fidelity to areas smaller than one degree of latitude, through the testimony of Ms. Newell. Newell Decl. ¶¶ 33-38.<sup>26</sup> At oral argument, Ms. Newell acknowledged that the same whales she identified as having extreme site fidelity to Depoe Bay are also found in other areas of the PCFG range. Tr.-5, at 10 lines 3-7; *id.* at 10 lines 11-13 (“[S]o they have certain areas that they specifically like to go, but that doesn’t mean that they don’t go to other areas.”); Tr.-5, at 50 lines 19-21 (“[M]y area of expertise is Newport and Depoe Bay, primarily Depoe Bay now. So once [whales] leave the area, I am not sure where they go.”). In response to Ms. Newell’s testimony that certain gray whales return to Depoe Bay year after year, Dr. Weller explained:

That’s not unusual or unexpected. But it doesn’t mean those whales stay there the entire time. So they return year after year it might be for a single day. And she may see them. I don’t know her data, but it may be the case that they are seen on

---

<sup>25</sup> Mr. Schubert has not conducted or participated in any research or published any peer-reviewed papers on gray whales, marine ecology, or climate change. Tr.-4, at 36 lines 17-25 to 37, lines 1-14. He testified “as an expert to the extent that I’ve read a fair amount of the literature.” Tr.-4, at 46 lines 10-12. He acknowledges that he has not studied gray whales “to the extent that Mr. Scordino and Dr. Weller has,” and that he’s “not a modeler . . . I’m not like, perhaps, Dr. Moore or Dr. Brandon where they can – it just makes sense to them. Tr.-4, at 32, lines 7-8, Tr.-4, at 43 lines 20-23.

<sup>26</sup> Ms. Margaret Owens, who appeared on behalf of PCPW, also asserts that there are subgroupings of whales within the PCFG that reside in specific portions of the PCFG range. Declaration of the Peninsula Citizens for the Protection of Whales (PWPC) (May 17, 2019) ¶ 4; PCPW Rebuttal to Yates (Aug. 6, 2019) ¶ 10. NMFS respects Ms. Owens’s opinions and long dedication to the Makah whaling issue. See Tr.-1, at 71 lines 12-17. However, Ms. Owens is not and does not claim to be a scientist, see Owens Decl. ¶ 1, therefore to the extent her scientific opinions and interpretation of the scientific literature conflict with those of Dr. Weller or Dr. Moore, Dr. Weller’s and Dr. Moore’s opinions should be given greater weight. See *Steadman*, 450 U.S. at 102 (agency decision-making must be based on reliable evidence); 16 U.S.C. § 1371(a)(1)(A), 1371 (MMPA waiver and regulations must be based on best scientific evidence available).

a single day, they go elsewhere, they come back, they go elsewhere, they come back.”

Tr.-2, at 75 lines 17-24; *see also* Tr.-2, at 19-22 (“[A]s we’ve looked through the sighting records for PCFG whales, it really is pretty convincing that they show no fidelity to an area that’s smaller than about 60 kilometers.”) (testimony of Dr. Weller). Ms. Newell’s testimony that certain gray whales frequent Depoe Bay does not contradict NMFS’s conclusion that PCFG fidelity is to their range, within which they move widely, and does not provide a basis for finding that NMFS’s analysis fails to meet the “substantial evidence” standard. *See U.S. Steel Min. Co., Inc.*, 187 F.3d at 389; *National Labor Relations Bd.*, 316 U.S. at 106 (the possibility of drawing two inconsistent conclusions from the evidence does not prevent an agency’s decision from being supported by substantial evidence).

#### **b. Breeding Habits**

Under the proposed waiver and regulations, hunting or hunt training would only overlap with gray whale breeding between December and January. NMFS’s Proposed Findings ¶ 141. NMFS expects that few if any hunt activities would occur in December-January due to inclement weather. NMFS’s Proposed Findings ¶ 142. While it is possible that hunt activities could occur in December-January and could encounter mating whales, NMFS does not expect adverse biological effects due to the small portion of the migration corridor where hunt activities could occur, the limited likelihood of hunting or training due to poor weather conditions, and the fact that whales mate repeatedly throughout the migration, suggesting that any whales disturbed by hunt activities would have additional opportunities to breed. NMFS’s Proposed Findings ¶ 143.

Some of the whaling-opponent parties have suggested that the proposed hunt could have unanticipated effects on gray whales by striking pregnant whales or causing pregnant gray whales to abort their fetuses. *See e.g.*, Tr.-4, at 176 lines 1-6 (testimony of Ms. Newell

contending that stress “could” cause a pregnant female to abort her calf); Villegas-Amtmann Decl. ¶ 10 (a 4% loss of energy by a migrating whale “could” cause the whale to not reproduce that year); *id.* at 17. Whether some level of stress or energy loss could theoretically cause a pregnant gray whale to abort her fetus is not probative of whether disturbance from the proposed hunt can reasonably be expected to induce these effects. *See Bennett*, 176 U.S. at 176-77 (agency decision cannot be based on speculation). The scientific evidence in the record documents the robust status of the ENP stock and its resiliency over more than 50 years of monitoring despite ongoing more intensive hunting elsewhere in the system and other human disturbance and supports NMFS’s conclusion that the proposed hunt is unlikely to affect the ENP stock’s breeding habits. *See Consolidated Edison Co. of New York*, 305 U.S. at 217 (substantial evidence is such that a reasonable mind would accept to support a conclusion).

**c. Times and Lines of Migratory Movements**

Based on the analysis above regarding the likely effects of the proposed waiver on the ENP stock’s and the PCFG’s abundance and distribution, NMFS’s determination that the proposed waiver is unlikely to affect the stock’s migratory movements. Section IV.A.2.a, *supra*.

**3. NMFS Is Assured that the Proposed Waiver Is In Accord with the MMPA’s Purposes and Policies**

The purposes and policies of the MMPA include maintaining marine mammal stocks as a significant functioning element in the ecosystem of which they are a part, maintaining the health and stability of the marine ecosystem, and obtaining an optimum sustainable population keeping in mind the carrying capacity of the habitat. 16 U.S.C. § 1361. Based on careful consideration of the best available scientific evidence, NMFS determined that the proposed waiver is in accord with the MMPA’s purposes and policies. *See Tr.-1*, at 67 lines 9-11 (I’d say our approach is incredibly precautionary . . . .) (testimony of Mr. Yates).

**a. Effects to Marine Ecosystems**

Because the limited level of hunting that could occur under the proposed waiver and regulations would affect only a small fraction of the ENP stock in a small portion of its range, the proposed waiver would not have a discernible effect on the ENP stock's role in its ecosystem or on the health and stability of that ecosystem. NMFS's Proposed Findings ¶¶ 149-154. NMFS evaluated the potential impacts of the proposed waiver at the scale of the northern California Current ecosystem, which also corresponds to the seasonal range of the PCFG, and the smaller area of the proposed hunt, and determined that the hunt would not have a discernible effect on the functioning of ENP gray whales in their ecosystem or the hunt area. *Id.* NMFS's determinations are adequately supported by the record and substantial evidence.<sup>27</sup> *Id.*; 5 U.S.C. § 556(d).

**b. Optimum Sustainable Population**

As documented in NMFS's Proposed Findings, the potential removal of up to 2.5 whales average per year over 10 years is not expected to affect the ENP stock's abundance relative to OSP. NMFS's Proposed Findings ¶¶ 109-110; *see* Tr.-1, at 50 lines 5-8 ("Given the dynamics of the stock in question, and the proposed waiver, the impact of two and a half whales on a population this size has no detectable implication in any manner on meeting [the OSP] purpose of the Act."). This determination is fully supported by the record and substantial evidence. *Steadman*, 450 U.S. at 102.

**B. The Proposed Regulations Meet All Applicable Legal Standards**

---

<sup>27</sup> Ms. Owen's, PCPW's witness, argued that NMFS's ecosystem analysis improperly failed to include effects to the Salish Sea ecosystem. Owens Rebuttal to Yates ¶ 20. In response, Dr. Weller explained that NMFS did consider that ecosystem, and specifically excluded the Strait of Juan de Fuca, where PCFG whales predominate, from the hunt area to minimize impacts to the PCFG. Tr.-1, at 70-72; Tr.-2, at 88 lines 8-24.

As explained above, when issuing a waiver, NMFS must also adopt regulations governing the take of the affected stock. Section III.A.1, *supra*; 16 U.S.C. § 1371(a)(3)(A). As with a waiver, NMFS must rely on the best scientific evidence available and consult with the Commission in issuing regulations. For the reasons stated in Section IV.A.1 above, NMFS has met these requirements. Also, NMFS must deem the regulations “necessary and appropriate” to ensure that the authorized taking does not disadvantage the marine mammal stock and will be consistent with the MMPA’s purposes and policies. 16 U.S.C. § 1373(a). Again for the reasons explained above, NMFS has met these requirements. *See also United States v. Clark*, 912 F.2d 1087, 1090 (9th Cir. 1990) (delegation of MMPA rulemaking to NMFS confers broad authority, so long as the regulation conforms to the MMPA’s objectives). Finally, NMFS must fully consider effects to levels of marine mammal stocks, international obligations of the United States, marine ecosystems and the marine environment, fishery resources, and feasibility. 16 U.S.C. § 1373(b); *see Friends of Animals*, 1982 U.S. Dist. LEXIS 18171, \*10 (“Viewed as a whole, the statutory mandate [of MMPA § 1373] calls for the agency to exercise its judgment based on a variety of complex factors, keeping in mind the central concern of the Congress -- protection of the marine mammal population.”). These requirements are addressed below.

**1. Existing and Future Levels of Marine Mammal Species and Population Stocks**

NMFS fully considered the effects of the proposed regulations on existing and future levels of the ENP gray whale stock, as explained above. Section IV.A.2, *supra*. And, as explained in Section IV.B.6 below, NMFS fully considered the potential effects of the proposed regulations to WNP gray whales.

## **2. International Treaty and Agreement Obligations**

As stated, the United States is a party to the ICRW and has obtained a quota of five ENP gray whales per year for use by the Makah Tribe, which exceeds the number of whales that the Tribe could harvest under the proposed regulations. NMFS's Proposed Findings ¶¶ 15, 20. The IWC Scientific Committee, composed of the world's leading cetacean experts, evaluated the proposed hunt and determined that it would meet the IWCs conservation objectives, which are aligned with those of the MMPA, for ENP, PCFG, and WNP gray whales. *Id.* ¶ 17-19,75, 108. NMFS has met the MMPA's requirement to fully consider international obligations. *Friends of Animals*, 1982 U.S. Dist. LEXIS 18171, \*10 (MMPA § 1373 calls for agency to exercise its judgment keeping in mind the central concern of the Congress, protection of the marine mammal population).

## **3. Marine Ecosystem and Related Environmental Considerations**

In addition to fully evaluating the effects of the proposed regulations on the relevant marine ecosystems, see Section IV.A.3.a, *supra*, NMFS evaluated potential effects to other elements of the marine environment, including water quality, pelagic and benthic habitats, other species of fish and wildlife, and noise levels, and determined that any effects would be minimal. NMFS's Proposed Findings ¶ 163. The record provides substantial evidence documenting NMFS's consideration of this factor. *Id.*; *Friends of Animals*, 1982 U.S. Dist. LEXIS 18171, \*10.

## **4. Fishery Resources**

The proposed regulations would have no effect on the conservation, development, or utilization of fishery resources. NMFS's Proposed Findings ¶ 164.

## 5. The Economic and Technological Feasibility of Implementation

NMFS carefully consider the technological feasibility of the proposed regulations, as illustrated by the detailed requirements in the regulations themselves and the implementing guidance documents NMFS prepared outlining specific protocols for carrying out photo-identification/genetic matching and hunt monitoring. *See* NMFS Ex. 1-9 (NMFS Protocol for Identifying Gray Whales Encountered in Makah Hunts); NMFS Ex. 1-12 (NMFS Protocol for Monitoring Makah Gray Whale Hunts). Using photo-identification to identify WNP and PCFG whales is a technique well known and is technologically feasible. NMFS's Proposed Findings ¶ 168. The Tribe's 1999 gray whale hunt successfully demonstrated the technological feasibility of prosecuting a hunt under the proposed regulations. NMFS's Proposed Findings ¶ 167. Also, the Tribe has enacted a detailed Tribal Whaling Ordinance, demonstrating the feasibility of tribal hunt management. *Id.* The proposed regulatory provisions for marking and tracking handicrafts made from harvested whale parts is also technologically feasible. NMFS's Proposed Findings ¶ 169.

NMFS analyzed the economic costs of hunt management and law enforcement, concluding that NMFS's costs would primarily involve the continuation of longstanding whale surveys and photo-identification work, with additional funding of approximately \$2,000 per day of hunting needed to support NMFS monitoring and enforcement personnel. NMFS's Proposed Findings ¶ 165. The annual NMFS budget for marine mammal management in the West Coast Region is over \$700,000, so such costs are feasible to obtain and are not expected to affect NMFS's ability to implement a hunt. *Id.* NMFS appropriately considered economic and technological feasibility and documented its review with substantial evidence. *See* 5 U.S.C. § 556(d).

## 6. The Proposed Regulations Appropriately Manage Risk to WNP Gray Whales

In developing the proposed waiver and regulations, NMFS determined that the potential effect of the proposed hunt on WNP gray whales was an additional relevant factor that should be considered. NMFS evaluated the risk to WNP gray whales considering both: (1) the probability of encountering a WNP gray whale during an ENP gray whale hunt or hunt training; and (2) the likelihood that an encounter would kill or otherwise harm a WNP whale. Weller Decl. ¶¶ 64-65. To reduce the risk of encountering WNP gray whales during an ENP hunt, the proposed regulations contain a number of restrictions to limit the risk of death, injury, or other harm to WNP whales. These include alternating hunt seasons, a limit of three struck whales during even-year hunts, a ban on hunting during November or June, a seasonal restriction on training harpoon throws, restriction on multiple strikes within 24 hours during even-year hunts, and the requirement if a WNP whale is confirmed to be struck, the hunt will cease until steps are taken to ensure such an event will not recur. NMFS's Proposed Findings ¶¶ 170; *see* Tr.-1, at 28-29. The proposed regulation also reserves to NMFS the authority to require that the Tribe obtain incidental take authorization for unanticipated encounters with WNP gray whales if appropriate. NMFS's Proposed Findings ¶ 190.<sup>28</sup>

---

<sup>28</sup> In order to obtain incidental take authorization, the Tribe would need to show that the taking would have no more than a "negligible impact" on the WNP stock. *See* 16 U.S.C. § 1371(a)(5). At the hearing, AWI's counsel seemed to suggest that any encounters with WNP gray whales could not properly be characterized as "incidental" since the proposed hunt would target ENP gray whales, which are not visually distinguishable. *E.g.*, Tr.-1, at 56-58. This argument lacks merit. The probability of hunters encountering a WNP gray whale rather than an ENP gray whale during an even-year hunt is 0.05. NMFS's Proposed Findings ¶ 179. Moreover, nothing in the MMPA requires that the species of an individual marine mammal be visually identifiable as a prerequisite to an incidental take authorization. *See* Tr.-1, at 58 lines 13-20 (testimony of Mr. Yates, explaining the proposed hunt waiver would apply only to ENP gray whales).

NMFS's scientists undertook a risk analysis to quantify risk to WNP whales from strikes, strike attempts, and approaches. Based on conservative assumptions, there is a 7.4 percent probability of hunters striking one WNP gray whale over the 10 years of the regulations, meaning that one in 13.5 10-year hunt periods (*i.e.*, one year out of 135) would result in an individual WNP gray whale being struck. NMFS's Proposed Findings ¶ 180. NMFS further determined that there is a 36.5 percent probability that one WNP whale would be subjected to an unsuccessful strike attempt or training harpoon throw over the 10 years of the regulations, or one such encounter every 27 years. NMFS's Proposed Findings ¶ 182. As explained above, NMFS expects that a WNP whale subjected to an unsuccessful strike attempt or training harpoon throw would experience the event as a temporary disturbance that would not have a lasting effect on the whale's health or behavior. *See* NMFS's Proposed Findings ¶¶ 130-140.

As for approaches, given the proposed regulations' limits, NMFS's risk analysis indicates that approximately 18 WNP gray whales could be approached within 100 yards over the ten years of the waiver period, or an average of 1.8 whales approached per year. *Id.* ¶ 183. This analysis conservatively assumes that all allowed approaches (353) would be made during even-year hunts when there is the potential for WNP whales to be present in the hunt area and no approaches, either for training or hunting, would be made during odd-year hunts. *Id.* NMFS expects that ENP whales will be more readily available in the hunt area and the weather more conducive for hunting and training during summer and fall months. *Id.* 184-185. If the Tribe made the full number of approaches allowed under the proposed regulations and divided those approaches evenly between odd-year and even-year hunts, then our analysis suggests that less than one WNP whale (0.9 whale) would be subjected to an approach annually. *Id.* ¶ 186. An approach is not likely to result in more than temporary disturbance. *Id.* ¶ 187. In sum, NMFS

fully considered potential effects to WNP gray whales, adopted a number of restrictions to reduce such effects, and determined that the risk would be extremely low. Tr.-1, at 29 lines 19-22 (Mr. Yates averring that regulations appropriately protect WNP gray whales); *see also* NMFS Ex. 1-15, at 1 (letter from the Commission stating “[T]he Commission stands by its earlier comment that the risk of killing or seriously injuring a WNP gray whale appears to be sufficiently low that it should not present an insurmountable obstacle to NMFS moving forward with a proposed rule to authorize the Makah Tribe to take whales from the [ENP] stock.”). This evidence satisfies the applicable evidentiary standards. *Friends of Animals*, 1982 U.S. Dist. LEXIS 18171, \*10; *Consolidated Edison Co. of New York*, 305 U.S. at 217; *Friends of the Animals*, 1982 U.S. Dist. Lexis 18171, at \*10, \*13.

## VI. CONCLUSION

As documented above, the proposed waiver and regulations have been found to be appropriately robust and protective by the world’s foremost gray whale scientists, meet all applicable MMPA and APA standards, and therefore should be issued.

Respectfully submitted this 20<sup>th</sup> day of March, 2020.

CHRIS MCNULTY  
Section Chief  
National Oceanic & Atmospheric Administration Office of  
General Counsel, Northwest Section

By: /s/ Laurie K. Beale  
Laurie K. Beale, Attorney-Advisor  
Caitlin B. Imaki, Attorney-Advisor  
Rachel L. Morris, Attorney-Advisor  
7600 Sand Point Way NE  
Seattle, WA 98115  
*laurie.beale@noaa.gov*  
(206) 526-6327  
*caitlin.imaki@noaa.gov*  
(206) 526-6159  
*rachel.morris@noaa.gov*  
(206) 526-6537

*Counsel for the National Marine Fisheries Service*