

UNITED STATES OF AMERICA
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

In RE: :
Proposed Waiver and :
Regulations Governing : Docket No. 19-NMFS-0001
the Taking of Eastern North :
Pacific Gray Whales :
by the Makah Tribe : RIN: 0648-BI58 and
: RIN: 0648-XG584
:

REPORTER'S OFFICIAL TRANSCRIPT OF PROCEEDINGS
NOAA ADMINISTRATIVE PROCEEDING
HEARING ON PROPOSED WAIVER and RULEMAKING
DAY 1 of 6

Jackson Federal Building
915 Second Avenue
Seattle, Washington
Thursday, November 14, 2019

BEFORE:

THE HONORABLE GEORGE J. JORDAN
ADMINISTRATIVE LAW JUDGE

Also Present:

Heather L. MacClintock, Esquire, Attorney Advisor
Chang Zhou, Esquire Attorney Advisor

Timekeeper:

Joseph Heckwolf, Attorney-Advisor, NOAA

Sally Gessner, Court Reporter

APPEARANCES :

FOR NATIONAL MARINER FISHERIES SERVICE:

U.S. Department of Commerce
Office of General Counsel
National Oceanic & Atmospheric Administration
7600 Sandpoint Way, NE
Seattle, WA 98115

By: Laurie K. Beale, Esquire
Caitlin B. Imaki, Esquire
Rachel Morris, Esquire
Steve Stone
Chris McNulty

FOR THE MAKAH TRIBE:

Ziontz Chestnut, Attorneys at Law
2101 4th Avenue, Suite 1230
Seattle, Washington 98121-2331

By: Brian Gruber, Esquire
Wyatt Golding, Esquire
Marc Slonim, Esquire

FOR MARINE MAMMAL COMMISSION:

4349 East-West Highway, Room 700
Bethesda, MD

By: Michael L. Gosliner, Esquire, General Counsel

FOR SEA SHEPHERD CONSERVATION SOCIETY:

2226 Eastlake Avenue, East #108
Seattle, WA 98102

AND SEA SHEPHERD LEGAL

By: Brett Sommermeyer, Esquire
Catherine Pruett, Esquire
Darius Fullmer, Esquire, Esquire

FOR ANIMAL WELFARE INSTITUTE:

900 Pennsylvania Avenue, SE
Washington, D.C. 20016

By: William Eubanks, Esquire
Elizabeth Lewis, Esquire
Donald John "DJ" Schubert

FOR PENINSULA CITIZENS FOR THE PROTECTION OF WHALES:

612 Schmitt Road
Port Angeles, WA 98683

By: Margaret Owens

I N D E X

<u>WITNESS</u>	<u>EXAMINATION</u>	<u>PAGE</u>
Chris Yates	Direct - By Ms. Beale	13
	Cross - By Mr. Gruber	7
	Cross - By Ms. Lewis	45
	Cross - By Ms. Owens	67
	Cross - By Mr. Gosliner	76
	Redirect - By Ms. Beale	84
Shannon Bettridge, Ph.D.	Direct - By Ms. Imaki	86
	Cross - By Ms. Lewis	97
	Cross - By Mr. Sommermeyer	108
	Cross - By Ms. Owens	112
	Cross - By Mr. Schubert	117
	Cross - By Mr. Gosliner	119
	Redirect - By Ms. Imaki	122

E X H I B I T S

<u>Exhibit No.</u>	<u>Identified</u>	<u>Received</u>
ALJ-1 through ALJ-10	12	12

1 | try to keep the noise to a minimum so we can hear the
2 | witnesses during the hearing.

3 | Again, so the Marine Mammal Protection Act
4 | provides that an agency decision to waive the take
5 | moratorium and issue regulations governing the take of
6 | marine mammals must be made on the record after an
7 | opportunity for an agency hearing. This means it's a
8 | formal rulemaking, and the Administrative Procedure Act
9 | governs this rulemaking. This is more like an
10 | adjudication than a standard notice and comment
11 | rulemaking. I will be receiving evidence from the parties
12 | in this matter and the rules concerning evidence required.

13 | Now, NOAA has also promulgated regulations to
14 | govern the conduct of an agency hearing under 50 C.F.R.
15 | Part 228, and I will be applying those as well as the APA
16 | in this hearing.

17 | The Marine Mammal Protection Act has established
18 | a moratorium of the taking and importing of marine
19 | mammals. Take means to harass, hunt, capture, kill or
20 | attempt to harass, hunt, capture or kill any marine
21 | mammal. However, the moratorium was not absolute. An
22 | exception allows NMFS to waive the take moratorium from
23 | time to time, to adopt sort of a regulation governing that
24 | take and issue permits authorizing the take if certain
25 | criteria are met.

1 The Makah Tribe has requested that NMFS waive
2 the take moratorium and issue regulations allowing a
3 tribal hunt for Eastern North Pacific gray whales and the
4 making and sale of handicrafts. If a waiver is granted
5 and regulations are promulgated, the Tribe must separately
6 seek a Marine Mammal Protection Act permit to implement a
7 hunt.

8 A decision to waive the MMPA take moratorium
9 must be based on the best scientific evidence available,
10 made in consultation with the Marine Mammal Commission and
11 have due regard to the distribution, abundance, breeding
12 habits and times and lines of migratory movements of
13 marine mammal stock subject to the taking.

14 Also, in order to waive the moratorium, NMFS
15 must determine that the taking is in accord with sound
16 principles of resource protection and conservation as
17 provided in the purposes and policies of the Marine Mammal
18 Protection Act which include maintaining marine mammals as
19 a significant functioning element in the ecosystem of
20 which they are part, maintaining the health and stability
21 of the marine ecosystem, and obtaining an optimum
22 sustainable population, keeping in mind the carrying
23 capacity of habitat.

24 A decision to waive the take moratorium must be
25 accompanied by regulations governing the take.

1 Regulations to implement a waiver must ensure that the
2 taking will not be to the disadvantage to the stock and
3 will be consistent with the purposes and policies of the
4 Marine Mammal Protection Act.

5 NMFS has interpreted disadvantage in relation to
6 the impact and the take on the stock's optimal sustainable
7 population.

8 In deciding regulations, NMFS must give full
9 consideration to all factors that may affect the extent to
10 which the stock may be taken, but not limited: existing
11 and future levels of marine mammal species and population
12 stocks; existing international treaty and agreement
13 obligations of the United States; the marine ecosystem and
14 related environmental considerations; the conservation,
15 development, and utilization of fishery resources; and the
16 economic and technological feasibility of implementation.

17 Regulations implementing the taking may
18 restrict, among other things, the number, age, size, sex
19 of the animals taken and the season, manner and location
20 of the taking.

21 Any regulations issued are subject to periodic
22 review and modification to carry out the purposes of the
23 Marine Mammal Protection Act.

24 Again, as I noted, the original Notice of
25 Hearing was issued on April 5th. On June 26, 2019,

1 following a prehearing conference of the parties, the
2 *Federal Register* published a Notice of Final Agenda for
3 this proceeding.

4 At that time, I added an issue that was not
5 included in the original Notice of Hearing, and that issue
6 was is the Eastern North Pacific stock currently
7 undergoing an unusual mortality event? And if so, does
8 that merit further consideration before a waiver may be
9 granted?

10 No new parties sought the right to participate
11 on this issue. However, new evidence on this issue was
12 submitted by the original parties.

13 Several parties, after this final agenda, filed
14 motions requesting amendments to that final agenda. After
15 considering those motions and replies of the other
16 parties, I determined that certain issues in the final
17 agenda should be removed or modified for the purposes of
18 clarity. Finally, these modifications did not present any
19 new issues or fact not previously identified in the Notice
20 of Hearing or in the previously published version of the
21 final agenda. That agenda was published in the *Federal*
22 *Register* on November 4th.

23 Under the Administrative Procedure Act, in such
24 a rulemaking as this, when a party will not be prejudiced
25 thereby, the agency may adopt procedures for the

1 submission of all required evidence in written form.
2 NOAA, in this case, has established procedures where
3 direct testimony is submitted in written affidavit form.

4 When a witness is called to introduce direct
5 testimony in this matter, the witness will state his name
6 and occupation, state your qualifications for producing
7 the direct testimony, and if an expert, briefly state the
8 scientific or technical training that qualifies the
9 witness. The witness will then identify the direct
10 testimony previously submitted in accordance with these
11 regulations and briefly summarize that testimony.

12 Then the witness will be subject to appropriate
13 cross and direct examination, and any cross-examination
14 will be by a party whose interests are adverse to the
15 issue presented.

16 We hope to complete this hearing by the end of
17 next week. And after this hearing, the parties will be
18 submitting post-hearing briefs. And promptly after the
19 expiration period for receiving those briefs, I will
20 review the evidence and those briefs and issue a
21 recommended decision based on the record and transmit that
22 decision to the Assistant Administrator.

23 The recommended decision will include a
24 statement concerning the description of the history of the
25 proceedings, my findings on issues of fact and the reasons

1 | therefore, and my rulings on issues of law.

2 | According to procedural rules governing these
3 | matters, only registered parties may participate, though
4 | anyone is welcome to observe.

5 | Seven entities, in addition to NMFS, have
6 | registered as parties. I will now take the appearances.
7 | The Animal Welfare Institute.

8 | MR. EUBANKS: Yes, present, Your Honor.

9 | THE COURT: The Makah Tribe.

10 | MR. GRUBER: Present.

11 | THE COURT: The Marine Mammal Commission.

12 | MR. GOSLINER: Present.

13 | THE COURT: Inanna McCarty. Ms. McCarty has
14 | filed an initial filing but she has not participated
15 | otherwise. We'll still keep the record open in case she
16 | does appear.

17 | The National Marine Fisheries Service.

18 | MS. BEALE: Present.

19 | THE COURT: The Peninsula Citizens for the
20 | Protection of Whales.

21 | MS. OWENS: Present.

22 | THE COURT: And the Sea Shepherd Conservation
23 | Society and Sea Shepherd Legal.

24 | MR. SOMMERMEYER: Present, Your Honor.

25 | THE COURT: Very good.

1 After the conclusion of this hearing, again I
2 will be adopting a recommended decision and transmitting
3 it into NOAA's Assistant Administrator. The Assistant
4 Administrator will publish notice of the recommended
5 decision in the *Federal Register* and any interested person
6 may file comments. The Assistant Administrator will make
7 a final decision on the proposed regulations and waiver
8 where applicable.

9 The Assistant Administrator's decision may
10 affirm, modify, set aside in whole or in part, the
11 recommended findings and conclusions and decision of the
12 presiding officer. The Assistant Administrator may also
13 remand the hearing record back to me for a fuller
14 development of the record.

15 At this stage of the proceedings, the
16 regulations require me to introduce the following
17 documents into the record:

18 First, the Notice of Hearing, as published in
19 the *Federal Register*, is ALJ Exhibit 1. The Proposed Rule
20 is ALJ Exhibit No. 2; the original hearing agenda, ALJ
21 Exhibit 3; the *Federal Register* notice changing the
22 hearing date, ALJ Exhibit 4; the updated hearing agenda,
23 ALJ Exhibit 5; the 2015 Draft Environmental Impact
24 Statement, ALJ Exhibit 6; the public comments on the Draft
25 Environmental Impact Statement, ALJ Exhibit 7; the 2015

1 draft, Environmental Impact Statement comment response
2 table, ALJ Exhibit 8; the 2015 Draft, Environmental Impact
3 Statement responses to frequent comments, ALJ Exhibit 9;
4 and a list of the parties, ALJ Exhibit 10.

5 (Administrative Law Judge
6 Exhibits 1 through 10 marked for
7 identification.)

8 Do any of the parties object to the admission of
9 these documents?

10 (No response.)

11 THE COURT: If not, they are admitted as marked.

12 (Administrative Law Judge
13 Exhibits 1 through 10 received in
14 evidence.)

15 THE COURT: At this stage, do any of the parties
16 have any preliminary matters to discuss before we begin?

17 (No response.)

18 THE COURT: I hear not.

19 Just two other matters quickly. I understand
20 that NOAA has filed a Motion to Amend certain elements of
21 the regulation which has been cleared with the other
22 parties and, again, we will take that under advisement
23 during the hearing. That was not scheduled in the regular
24 course of evidence, and hopefully we'll hear that long
25 before Friday.

1 So at that stage, again NOAA is the proponent of
2 the rule and therefore bears the burden. So, NOAA, you
3 may call your first witness.

4 MS. BEALE: Thank you, Your Honor. We would
5 like to call Mr. Chris Yates as our first witness.

6 (Whereupon,

7 **CHRIS YATES,**

8 was called as a witness and, after having been first duly
9 sworn, was examined and testified as follows:)

10 THE COURT: Please be seated.

11 MS. BEALE: Your Honor, I intend to ask
12 Mr. Yates to summarize his direct testimony as well as
13 provide some testimony as to rebuttal, I expect to take
14 maybe 20 to 30 minutes.

15 **DIRECT EXAMINATION**

16 BY MS. BEALE:

17 Q. My name is Laurie Beale. I'm with the National
18 Oceanic and Atmospheric Administration, on behalf of the
19 National Marine Fisheries Service, which we also refer to
20 as NMFS. Good morning, Mr. Yates.

21 A. Good afternoon.

22 Q. Would you please state and spell your name for
23 the record?

24 A. My name is Chris Yates, C-h-r-i-s, Y-a-t-e-s.

25 Q. And what is your current address?

1 A. My work address is 501 Ocean Boulevard, Long
2 Beach, California.

3 Q. Where are you currently employed?

4 A. I'm currently employed by the National Marine
5 Fisheries Service, West Coast Region.

6 Q. And what is your position?

7 A. I am the Assistant Regional Administrator for
8 Protective Resources.

9 Q. Could you briefly describe your job
10 responsibilities?

11 A. My job responsibilities include overseeing the
12 implementation of the Endangered Species Act and Marine
13 Mammal Protection Act for NOAA trust species.

14 Q. What are your responsibilities with respect to
15 proposed waiver and regulation?

16 A. I am the manager of the group of individuals
17 that has been working to develop a proposed waiver and
18 regulations to respond to the Tribe's request to waive
19 moratorium.

20 Q. Could you please identify the declarations that
21 you submitted in this matter?

22 A. I've submitted five declarations, both direct
23 and rebuttal from April through September of this year,
24 regarding the issues of facts and in particular the
25 follow-on declarations regarding the unusual mortality

1 event.

2 Q. Mr. Yates, Judge Jordan didn't summarize this,
3 but could you explain the factors that NMFS needs to
4 consider under the MMPA in order to issue a waiver?

5 THE COURT: I couldn't hear that last statement.
6 I think the thing went out.

7 MS. BEALE: I'll say that again.

8 BY MS. BEALE:

9 Q. Mr. Yates, could you explain the factors that
10 NMFS needs to consider in order to issue a waiver?

11 A. In order to waive moratorium, we're obligated to
12 give due regard to the abundance, distribution, breeding
13 habits, times and migratory movements of the stock upon
14 which we are proposing to waive the moratorium. And we
15 must be assured that our proposal does not disadvantage
16 the stock and is consistent with the purposes and policies
17 of the Marine Mammal Protection Act.

18 Q. And what are the purposes and policies of the
19 Act?

20 A. The purposes and policies of the Marine Mammal
21 Protection Act are to maintain marine mammals as a
22 functioning element of their ecosystem and to provide for
23 marine mammal stocks to maintain or attain optimum
24 sustainable population levels.

25 Q. Could you explain the concept of optimum

1 | sustainable population level?

2 | A. Optimum sustainable population is a range of
3 | abundance between the point where the population is having
4 | its maximum productivity up to the carrying capacity of
5 | that stock given the constraints of the ecosystem.

6 | Q. What do you mean by carrying capacity?

7 | A. Carrying capacity is the abundance of animals
8 | that the resources of the ecosystem at the time can
9 | support.

10 | Q. Mr. Yates, what would the waiver that NMFS is
11 | proposing here authorize?

12 | A. The waiver that we've proposed would waive the
13 | moratorium for Eastern North Pacific gray whales for a
14 | period of 10 years to allow for a limited ceremonial and
15 | subsistence harvest by the Makah Indian Tribe.

16 | Q. How many ENP gray whales could be killed under
17 | your proposal?

18 | A. Our proposal limits the number of animals that
19 | could be killed to 25 over a 10-year period, an average of
20 | 2½ per year.

21 | Q. What is the most recent published abundance
22 | estimate for this stock?

23 | A. The most recent published abundance estimate was
24 | 26,960 animals.

25 | Q. How would you characterize the stock's

1 biological status?

2 A. Eastern North Pacific stock of gray whales is a
3 very healthy population.

4 Q. Thank you. I'd like for you to look at NMFS
5 Demonstrative Exhibit No. 1. Would you identify this
6 document?

7 A. This document demonstrates the range of the
8 Eastern North Pacific stock of gray whales.

9 Q. Could you indicate on the map, the range of the
10 ENP gray whale stock?

11 A. The Eastern North Pacific gray whales range from
12 their Artic feeding grounds down to their Mexican calving
13 grounds.

14 Q. And on that map, could you show us where the
15 Tribal ceremonial and subsistence hunting could occur
16 under your proposed waiver?

17 A. We're proposing to waive the moratorium only in
18 the coastal portion of the Makah's usual and accustomed
19 grounds, which is this area right here comprising
20 approximate 1% lineal distance of the range of the Eastern
21 North Pacific stock of gray whales.

22 Q. Mr. Yates, did you evaluate how the proposed
23 waiver would affect the ENP stock?

24 A. We did.

25 Q. What did NMFS conclude?

1 A. NMFS concluded that the limited removal of 25
2 whales over 10 years out of a healthy stock, with a recent
3 abundance estimate of nearly 27,000 would have no
4 detectable impact on the Eastern North Pacific stock.

5 Q. Did NMFS evaluate how the proposed waiver would
6 affect the marine environment?

7 A. We did.

8 Q. What did NMFS conclude?

9 A. NMFS evaluated the effect of the removing 25
10 gray whales over 10 years on the marine environment at
11 varying scales, and similarly concluded that there was no
12 scientific information available that would lead us to
13 believe that it would have any detectable impact on the
14 marine environment.

15 Q. Thank you. I'd like to refer you now to NMFS
16 Demonstrative Exhibit No. 2. Well, before inquiring about
17 that, let me ask, Mr. Yates, your testimony explains that
18 NMFS recently declared an unusual morality event for the
19 ENP stock, correct?

20 A. That is correct.

21 Q. And what does this document show us?

22 A. This document provides data on the --

23 MR. SOMMERMEYER: Objection. Lack of
24 foundation. I'd like one clarification. Are we required
25 to lay a foundation for demonstrative exhibits in this

1 proceeding?

2 THE COURT: Could you repeat that again?

3 MR. SOMMERMEYER: Are we required to lay a
4 foundation for demonstrative exhibits in this proceeding?

5 THE COURT: Given the nature that -- it's a
6 matter that can be raised later if you wish to in cross-
7 examination, argue that it does not meet that requirement.
8 But given the nature of these proceedings, with the pre-
9 submission by written and other demonstrative evidence and
10 exhibits which all the parties have done, I will admit --
11 I will allow this to come in as an exhibit, but again
12 we'll see what happens with cross-examination as to its
13 validity.

14 MR. SOMMERMEYER: Thank you, Your Honor.

15 MS. BEALE: And to clarify, Your Honor, NMFS
16 submitted these four proposed demonstrative exhibits with
17 the prehearing brief, and the sources for the data
18 displayed on the exhibits are noted on each exhibit and is
19 derived from a NMFS exhibit previously submitted into
20 evidence.

21 THE COURT: I understand.

22 BY MS. BEALE:

23 Q. Mr. Yates, how has the current UME, that's
24 unusual morality event, affected the ENP gray whale stock
25 to date?

1 A. To date, the information that we have available
2 to us is that there have been, in fact, 214, as I was
3 briefed this morning -- different than the 213 that was on
4 the slide -- 214 recorded strandings of gray whales during
5 the -- attributed to the unusual mortality event.

6 Q. What would that mean in terms of effects to the
7 ENP stock population to date?

8 A. We certainly don't know that for certain. We're
9 investigating the cause of the UME. There is published
10 literature that estimates that for each whale that dies,
11 gray whales along the west coast, that we would find
12 somewhere between 3.9 and 13% of those whales. So using
13 that best available science, you could presume that
14 somewhere between 1700 and 5500 whales may have died
15 during the unusual mortality event thus far, which would
16 reduce the population its previously estimate of around
17 27,000 to somewhere between 21- and 25,000.

18 Q. Does NMFS know why the UME has occurred?

19 A. We do not.

20 Q. Is this the first UME that has been declared for
21 the ENP gray whale stock?

22 A. It is not. There was a previous UME in the
23 years 1999 to 2000.

24 Q. I'd like to now refer you to NMFS demonstrative
25 Exhibit No. 3. Could you identify this document?

1 A. This document is a visual representation of the
2 abundance estimates for the overall Eastern North Pacific
3 gray whale population and also for the Pacific Coast
4 Feeding Group component of the Eastern North Pacific
5 population.

6 Q. About how low did the ENP stock's abundance drop
7 during that previous UME you mentioned?

8 A. The UME from 1999 to 2000, it was estimated that
9 the population fell from around 21,000 to around 16,000
10 animals.

11 Q. Does NMFS know whether the stock dropped below
12 its optimum sustainable population levels at that time?

13 A. The analyses that were performed confirmed that
14 the stock did not drop below its OSP levels.

15 Q. Does NMFS know what caused the 1999-2000 UME?

16 A. The final report from the investigative team was
17 unable to provide conclusive determination of the causes.

18 Q. What were some causes that were investigated?

19 A. Many causes were investigated. In particular
20 prey limitation due to short-term changes in the
21 environment during that time. Other causes such as ship
22 strikes, disease, biotoxins, any threats that could have
23 potentially been contributing to the unusual mortality
24 event.

25 Q. What happened to the ENP stock after the 1999-

1 2000 UME? Please refer to the exhibit if that's helpful.

2 A. So following the 1999 to 2000 UME, the stock
3 rose to its historic abundance levels, the most previous
4 abundance estimate.

5 Q. Thank you. I'd like to now refer to NMFS
6 demonstrative Exhibit No. 4. Mr. Yates, could you
7 identify this document?

8 A. This document is a summary of the key elements
9 of the proposed hunt under our proposed regulations.

10 Q. Looking at that top line there, why is NMFS
11 proposing to limit the waiver to a 10 year period?

12 A. We've chosen to limit the waiver to a 10 year
13 period as a precautionary measure, to allow for us to,
14 along with the Tribe, gather information about the conduct
15 of the hunt, any impacts of the hunt and to use adaptive
16 management to allow us to continue a robust assessment of
17 any potential impacts of the hunt.

18 Q. What if new information becomes available during
19 the 10 year waiver period?

20 A. In addition to that limited waiver period, we've
21 included a limit on the permit durations that would be
22 issued subsequent to the waiver of the moratorium under
23 these regulations. The initial permits would be limited
24 to only 3 years, with a maximum 5 for any following
25 permit, but we have the discretion to limit them to as low

1 as one year if we so chose to.

2 Q. Referring you to the top line, the blue and
3 gold, this refers to even year hunts and odd year hunts.
4 Could you explain how that would work?

5 A. We designed the hunts to be conducted on an
6 alternating year schedule. The even year hunts during the
7 winter migration period, from December through May. The
8 odd year hunts during summer, from July through October,
9 and we did that in particular to meet our additional
10 conservation and management objectives that we identified
11 associated with the hunt, and those include ensuring that
12 the hunts would not reduce the Pacific Coast Feeding Group
13 to levels below its historic stable abundance over the
14 past 18 years or so, and to limit the probability of North
15 Pacific gray whale.

16 Q. What is the Pacific Coast Feeding Group? I
17 believe you referred to them as PCFG.

18 A. The Pacific Coast Feeding Group is our
19 individuals of the Eastern North Pacific population that
20 exhibit a different migratory pattern. They stop along
21 the west coast of the United States and northern
22 California up to Vancouver Island, rather than continuing
23 their migration up to the Arctic to feed during the summer.

24 Q. Is the PCFG considered a stock under the MMPA?

25 A. It is not.

1 Q. And what are WNP gray whales?

2 A. Western North Pacific gray whales are a separate
3 stock of gray whales that feed in the western North
4 Pacific.

5 Q. I'd like to first ask you a few questions about
6 PCFG. If you could go back for a moment to Exhibit 1,
7 demonstrative Exhibit 1. Could you point out the range of
8 the PCFG?

9 A. Yes, I can. Basically northern California up to
10 northern Vancouver Island. So it's this range right here.

11 Q. Do PCFG whales generally occur in that range
12 year round?

13 A. Not generally. Most of them after eating in the
14 summer join the rest of herd migrating south to the
15 Mexican calving grounds.

16 Q. How big is that PCFG summer range relative to
17 the hunt area if you know?

18 A. The proposed hunt area as I'm demonstrating here
19 is about 4% lineal range of the designated range of the
20 Pacific Coast Feeding Group.

21 Q. What is the most recent abundance estimate for
22 the PCFG?

23 A. The most recent abundance estimate for the PCFG
24 population is 243 animals.

25 Q. How would you characterize the PCFG's abundance

1 trend?

2 A. The Pacific Coast Feeding Group has been stable
3 and increasing since 2002.

4 Q. If the PCFG is not a stock, why did NMFS include
5 their protection as a management goal here?

6 A. We developed the management objectives of
7 maintaining PCFG at their current stable levels or above,
8 for two particular reasons. One, to further implement our
9 due regard to the distribution of the Eastern North
10 Pacific stock. PCFG are part of the Eastern North Pacific
11 stock, and clearly the range of these animals during the
12 summer comprise part of the distribution. Additionally,
13 we included that as a precautionary measure in the event
14 that PCFG might be designated as a stock in the future.

15 Q. Going back again to demonstrative Exhibit 4,
16 could you summarize the management measures intended to
17 protect the PCFG?

18 A. Yes, I can. We have various management measures
19 proposed to protect the PCFG. The first one I've already
20 covered is the alternating year hunts.

21 In addition, we have strike limits on the PCFG.
22 Of the 25 strikes available to the Tribe over a 10 year
23 period, only 16 would be allowed on Pacific Coast Feeding
24 Group animals and only 8 of those allowed on female PCFG
25 whales. We've implemented a very conservative strike

1 | accounting scheme whereas all strikes that happen during
2 | the odd year summer hunts will be counted against a PCFG
3 | allocation, despite the fact that the best scientific
4 | evidence available that indicates that only about half of
5 | those animals are actually PCFG animals.

6 | We've included strike limits during the summer
7 | odd year hunts to allow for only two strikes or one landed
8 | animal during the summer months. So if the first strikes
9 | are successful and a whale is landed, there would be no
10 | additional strikes allowed.

11 | And perhaps most importantly, we've set stock
12 | hunt abundance thresholds for the PCFG at 192 animals for
13 | a point estimate and 171 animals at what we call an N min,
14 | a minimum population estimate. Those numbers are from the
15 | most recent period of stability and growth of the PCFG.
16 | Those were the lowest levels that PCFG exhibited during
17 | that time in 2007.

18 | Q. Okay. So how would the stop hunt triggers work
19 | in practice?

20 | A. So each year there are surveys done to assess
21 | the abundance and mixing proportions of the Pacific Coast
22 | Feeding Group. Over the past 20 years, about every year
23 | and a half, we receive an updated abundance level on those
24 | and if the Pacific Coast Feeding Group population were to
25 | fall below those levels or to be predicted to fall below

1 | those levels, then the hunt would cease.

2 | Q. Has the PCFG been affected by the current UME?

3 | A. The only information we have is actually one of
4 | the most recent strandings that occurred in early November
5 | of the animals that we have thus far been able to take
6 | photographs of and compare to existing photo ID catalogs,
7 | we have one PCFG whale has been identified as stranded in
8 | an unusual mortality event.

9 | Q. Was the PCFG affected by the 1999-2000 UME?

10 | A. Actually it was not. During that time, the
11 | population of the PCFG actually increased.

12 | Q. Mr. Yates, in your professional opinion, are
13 | these proposed management measures appropriate to achieve
14 | your management goal with regard to the PCFG?

15 | A. Yes.

16 | Q. Thank you. I would now like to ask you to
17 | explain some of the measures related to the WNP stock. Why
18 | did NMFS include protections for WNP gray whales?

19 | A. WNP gray whales are listed as endangered under
20 | the Endangered Species Act, and thus automatically
21 | designated as depleted under the Marine Mammal Protection
22 | Act. So one of our management objectives was to limit the
23 | probability of an accidental strike of a western North
24 | Pacific gray whale.

25 | Q. What is the most recent abundance estimate for

1 the WNP stock?

2 A. The most recent abundance estimate of the WNP is
3 290 animals.

4 Q. How would you describe this stock abundance
5 trend?

6 A. The western North Pacific is increasing at an
7 annual rate of around 2 to 5%.

8 Q. So again referring to demonstrative Exhibit 4,
9 what measures is NMFS proposing to protect WNP gray
10 whales?

11 A. So repeating myself a little bit, the odd,
12 alternating year hunts. During the summertime hunts,
13 occurring when the WNP would be feeding in the Arctic, we
14 anticipate zero chance of striking western North Pacific.
15 So the only time that we would anticipate any potential of
16 an accidental strike of WNP would be during the even year
17 hunts during the migration time.

18 We've included various provisions including
19 limiting strikes to 3 during migratory hunts, requiring
20 that any strike happening during that migratory hunt would
21 require a 24 hour waiting period so that it would limit
22 the risk of any potential strike of western North Pacific
23 animals traveling together.

24 If a western North Pacific whale is struck and
25 landed, we require that the hunt stop until the agency is

1 | able to determine whether that whale is identified in the
2 | western North Pacific photo catalog. If so, most
3 | importantly, the hunt would cease until such time that
4 | NMFS was able to contemplate a hunt that would have no
5 | potential of striking western North Pacific animals.

6 | Q. Mr. Yates, is it possible that even with these
7 | measures, a WNP whale could be struck by hunters?

8 | A. Yes, it is.

9 | Q. What type of analysis did you use to understand
10 | that risk?

11 | A. Dr. Moore and Dr. Weller did an analysis of the
12 | potential probability of a strike occurring. For any
13 | individual strike during the migratory hunt, the
14 | probability of striking a western North Pacific gray whale
15 | is 1/2 of 1% which if the hunt were to continue into
16 | perpetuity, with the existing hunt management scheme and
17 | other variables, would equate to a western North Pacific
18 | being struck once every 135 years.

19 | Q. Mr. Yates, in your professional opinion, are the
20 | measures in the proposed regulations appropriate to limit
21 | the risk to WNP gray whales?

22 | A. They are.

23 | Q. Did you form a professional opinion as to
24 | whether this hunt proposal meets the applicable MMPA
25 | requirements?

1 A. I have.

2 Q. What do you conclude?

3 A. My professional opinion is that it meets the
4 requirements of the Marine Mammal Protection Act.

5 Q. I'd like to go back to demonstrative Exhibit No.
6 3. Mr. Yates, for how long has NMFS been keeping records
7 of the ENP stock's abundance?

8 A. The Eastern North Pacific population assessments
9 go back to around 1967.

10 Q. Is it common for NMFS to have abundance records
11 for over 50 years for marine mammal stock?

12 A. It is not. This is one of the best studied
13 marine mammal populations in the world.

14 Q. How would you describe that the state of
15 scientific knowledge about gray whales generally?

16 A. Robust.

17 Q. How long has NMFS monitored records of PCFG
18 abundance?

19 A. There's been monitoring and abundance estimates
20 of the Pacific Coast Feeding Group since the late 1990s.

21 Q. How often are PCFG abundance surveys carried
22 out?

23 A. Those surveys are conducted every year during
24 the summer.

25 Q. How about records for the WNP stock abundance?

1 How long has NMFS been tracking those?

2 A. WNP has also similarly been modeled or surveyed
3 and abundance estimates calculated since the mid-1990s.

4 Q. How frequently is WNP abundance assessed?

5 A. Also every year.

6 Q. Does NMFS abundance estimates that reflect
7 mortalities from the 2019 UME?

8 A. Not currently.

9 Q. Do you expect to have such estimates?

10 A. So we are currently conducting the southbound
11 migration population assessment. That assessment will be
12 completed and then finalized in 2020, hopefully early
13 2020. That abundance estimate will reflect the mortality
14 that has occurred thus far in the unusual mortality
15 events. So we'll have a much better understanding than
16 those estimates and extrapolations that I gave earlier
17 about the impact of the UME on the population.

18 Q. Mr. Yates, in your professional opinion, is the
19 proposed waiver based on the best scientific evidence
20 available?

21 A. It is.

22 Q. Was NMFS hunt proposal subjected to any external
23 review?

24 A. It was. It was reviewed by the Marine Mammal
25 Commission, and also the International Whaling Commission

1 Scientific Committee.

2 Q. What is the Marine Mammal Commission?

3 A. The Marine Mammal Commission is a federal
4 scientific advisory body created under the Marine Mammal
5 Protection Act that provides scientific and conservation
6 advice on marine mammals.

7 Q. What did the Marine Mammal Commission advise
8 NMFS regarding the proposed waiver?

9 A. The Marine Mammal Commission concluded that our
10 proposed hunt and regulations was consistent with the best
11 scientific information available, was appropriately
12 precautionary and advised us to proceed with proposing a
13 waiver of the moratorium.

14 Q. What is the IWC Scientific Committee?

15 A. The IWC Scientific Committee is a group of
16 international marine mammal researchers and experts that
17 provide scientific advice to the member nations of the
18 International Whaling Commission.

19 Q. And I apologize to our court reporter. I should
20 have said International Whaling Commission and the acronym
21 for that is IWC. What did the IWC Scientific Committee --
22 why did the IWC -- let me rephrase. Why did the IWC
23 Scientific Committee review NMFS' hunt proposal?

24 A. We requested that IWC Scientific Committee
25 review the proposal to ensure it was consistent with the

1 | aboriginal subsistence whaling objectives of the IWC.

2 | Q. What did the IWC conclude?

3 | A. The IWC concluded that our proposed hunt was
4 | consistent with their conservation objectives for the ENP,
5 | the Pacific Coast Feeding Group portion of the ENP and the
6 | western North Pacific.

7 | Q. Mr. Yates, Mr. Schubert states in his rebuttal
8 | declaration that NMFS failed to consider the long-term
9 | implications of climate change particularly in the Arctic
10 | in proposing the waiver. How do you respond?

11 | A. I disagree with that assertion.

12 | Q. Where in the record has NMFS documented a
13 | climate change analysis?

14 | A. We did an analysis in the draft environmental
15 | impact study in particular, in the biological report, in
16 | our declarations and also reviewed the information in the
17 | stock assessments reports.

18 | Q. What did your analysis of the effects climate
19 | change show?

20 | A. Our review of the effects of climate change on
21 | Eastern North Pacific gray whales indicates that while
22 | climate change has been ongoing and is expected to keep on
23 | going, during that time, the Eastern North Pacific stock
24 | of gray whale has increased to its highest abundance
25 | levels on record.

1 Q. Mr. Schubert also asserts that the current UME
2 could be due to climate change effects and therefore
3 authorizing a hunt is biologically reckless. How do you
4 respond to that?

5 A. We don't know the cause of the UME. What we do
6 know is that, as I mentioned, climate change has been
7 ongoing. The Eastern North Pacific stock has proved to be
8 particularly resilient and has been increasing during that
9 time.

10 Q. Did NMFS consider the possibility of an UME in
11 developing the waiver?

12 A. We did.

13 Q. How did you take that into consideration?

14 A. So our draft environmental impact study, along
15 with our stock assessment reports and our biological
16 report, all anticipated that a periodic die off of this
17 population could occur. We saw that before in 1999 to
18 2000. We've seen that most recently with other marine
19 mammal species on the west coast such as California sea
20 lions.

21 And, it's a foundational principle of ecological
22 understanding that when you have a population that is
23 perhaps near or exceeding carrying capacity that temporary
24 fluctuations in the environment changing the carrying
25 capacity would lead to die offs of these animals.

1 Q. Are there any management measures in the
2 proposed regulations that address the consequences of the
3 UME?

4 A. Absolutely. Most importantly, the fact that we
5 decided to limit the waiver to only 10 years.
6 Additionally, our ability to limit the permit durations to
7 as low as 1 year.

8 Q. Some of the parties argued that NMFS failed to
9 consider cumulative effects in the waiver analysis. Did
10 NMFS consider cumulative effects?

11 A. We considered cumulative effects in our draft
12 environmental impact statement. Cumulative effects
13 analysis is not a requirement for this MMPA process.
14 However, we relied on that analysis to consider whether
15 the proposed hunt would disadvantage the stock.

16 Q. What types of activities did NMFS consider in
17 its DEIS cumulative effects analysis?

18 A. We considered all of the known threats to
19 Eastern North Pacific gray whales. Certainly climate
20 change, ocean acidification, many other human impacts such
21 as military exercises, increasing noise, whale watching
22 disturbance, entanglements and interactions with fishing
23 gear, marine energy developments, amongst others.

24 Q. What does NMFS conclude regarding the potential
25 for the proposed waiver to cause the cumulative impacts?

1 A. That may be the case, yes.

2 Q. Was the purpose of the last proposed waiver or
3 waivers that you're familiar with, from that time period,
4 to authorize the hunting of marine mammals?

5 A. It was not.

6 Q. Was the purpose -- sorry. Prior to the Makah
7 Tribe's waiver request in 2005, had NMFS ever received a
8 request for a waiver for the purpose of hunting marine
9 mammals?

10 A. Not to my knowledge.

11 Q. In the 14 years since the Tribe's request in
12 February 2005, has NMFS received any waiver requests for
13 any purpose?

14 A. No.

15 Q. Are you aware that Alaska natives on the north
16 slope of Alaska hunt approximately 45 bowhead whales each
17 year for subsistence purposes?

18 A. Yes, I am aware of that.

19 Q. Are bowhead whales subject to that hunt listed
20 as endangered species under the Endangered Species Act?

21 A. Yes.

22 Q. Do Alaska natives have a MMPA waiver in order to
23 conduct their bowhead whale hunt?

24 A. No.

25 Q. And that's because they have an exemption or an

1 | exception within the MMPA for Alaska native subsistence
2 | hunting. Is that right?

3 | A. That is correct.

4 | Q. Now, you have five declarations I believe filed.
5 | Is that right?

6 | A. Yes.

7 | Q. So I refer to the ones by number and starting
8 | off with your third declaration, which I believe was a
9 | rebuttal declaration, in paragraph 4 of that declaration,
10 | you state, "NMFS acknowledges and respects the Tribe's
11 | treaty right but did not rely on the treaty right in
12 | evaluating whether the proposed waiver and regulations
13 | satisfy the MMPA standards." Does that sound right?

14 | A. That is correct.

15 | Q. In evaluating the effects of the proposed waiver
16 | and regulations, did NMFS consider whether the limitations
17 | those proposed regulations would impose on the Tribe are
18 | consistent with the Tribe's treaty right to hunt whales?

19 | A. We considered the Tribe's treaty rights, and it
20 | was not a foundational requirement of our proposal to
21 | waive the moratorium and issue regulations. We certainly
22 | considered the Tribe's treaty desire to resume ceremonial
23 | and subsistence hunting as part of our creating the
24 | proposed hunt regulations.

25 | Q. Can I ask you, in your declarations, you speak

1 | to that issue, precisely where you indicate that NMFS
2 | considered the treaty right in responding to the Tribe's
3 | request?

4 | A. As we mentioned, we respect the Tribe's treaty
5 | rights. The United States Government has a long history
6 | of supporting the Tribe's desire to resume ceremonial and
7 | subsistence hunting as evidenced by our carrying forward a
8 | request for a catch limit at the International Whaling
9 | Commission. Absent that treaty right and absent that
10 | quota from the International Whaling Commission, we would
11 | not be moving forward with a MMPA waiver for gray whales.

12 | Q. In evaluating the effect of the proposed waiver
13 | and regulations, did NMFS ever consider the Tribe's
14 | understanding of its treaty right to hunt whales and
15 | utilize whale products?

16 | A. Can you repeat the question please?

17 | Q. In evaluating the effect of the proposed waiver
18 | and regulations, did NMFS consider the Tribe's
19 | understanding of its treaty right to hunt whales and
20 | utilize whale products?

21 | A. I believe we considered the Tribe's
22 | understanding. I'm not sure that I understand the
23 | question about how we considered the Tribe's
24 | understanding. So I apologize if I'm missing the gist of
25 | your question.

1 Q. Can you point to any place in your declaration
2 or other documents where you expressly stated that NMFS
3 was considering the Tribe's understanding of its treaty
4 right in your decisions?

5 A. Not from my recollection, but again I'm not sure
6 I understand the Tribe's understanding of their own treaty
7 right.

8 Q. I want to turn to some of the specific proposed
9 regulations. In paragraph 26, and now I'm referring to
10 your first declaration, you stated that, NMFS West Coast
11 Region adopted "two primary management goals to guide
12 development of the proposed waiver and regulations." Does
13 that sound right?

14 A. Correct.

15 Q. And you testified about that with Ms. Beale
16 earlier today, correct?

17 A. Correct.

18 Q. And both of the goals that you've described in
19 your testimony, in your declaration, relate to impacts of
20 the hunt on the WNP and PCFG whales. Is that right?

21 A. That's correct.

22 Q. Now, in the next paragraph, paragraph 27, you
23 state that, "To achieve our management goals, our proposed
24 waiver and regulations contain a number of restrictions."
25 Is that right?

1 A. That's correct.

2 Q. And a little further down in paragraph 44, you
3 describe the restrictions that the proposed regulations
4 would impose on the Tribe's use of gray whale products.
5 Is that right?

6 A. That's correct.

7 Q. How did those restrictions, those described in
8 paragraph 44, relate to achieving NMFS' stated management
9 goals regarding the WNP and the PCFG?

10 A. Well, I went over all of the restrictions of the
11 hunt and how they support our management objectives of
12 limiting a probability of a strike on western North
13 Pacific animals and maintaining Pacific Coast Feeding
14 Group abundance at its historic stable levels.

15 Q. But you would agree that once a whale is killed
16 and landed by the Tribe, there are additional regulations
17 that apply regarding the use of that whale?

18 A. There certainly are.

19 Q. And where did NMFS explain how those
20 restrictions on the use of whale products relate to the
21 goals regarding the WNP and PCFG whales?

22 A. So the restrictions on the WNP and PCFG were for
23 the purposes I stated. Once a whale is landed, those
24 additional regulations and hunt restrictions are to ensure
25 that the hunt is monitored, conducted in an orderly

1 manner, that the handicrafts are appropriately marked and
2 cataloged, that the whale products are used as proposed
3 through the regulations.

4 Q. Now, with respect to proposed regulations about
5 the use of edible whale products outside of the Makah
6 Reservation, the proposed regulations limit sharing with
7 non-members to a Tribal or inter-Tribal gathering
8 sanctioned by the Makah Tribal Council, and possession and
9 consumption by non-members to not more than 2 pounds of
10 edible whale product per person attending that gathering.
11 Is that correct?

12 A. That is correct. So we have submitted to the
13 Court proposed modifications to those restrictions.

14 Q. And I'm just asking about the proposed
15 regulations for now. And under those proposed
16 regulations, non-members must consume whale products at
17 the gathering. Is that right?

18 A. That's correct.

19 Q. Did NMFS intend to include the term -- in the
20 term Tribal or inter-Tribal gathering, any meal attended
21 by one or more Makah members?

22 A. I believe we intended to include what we wrote
23 in the regulation.

24 Q. That was what I asked. So if there were family
25 meal, for example, that included a Makah member, was that

1 NMFS' intent to include that in the definition or the
2 phrase, Tribal or inter-Tribal gathering?

3 A. I don't know the answer to that question, of
4 what would our definition of inter-Tribal gathering.

5 Q. And you considered the following situation, an
6 off-reservation household includes a Makah father, a non-
7 Makah mother, a non-Makah grandparent and two Makah
8 children. For the family to eat whale together at a meal,
9 such as dinner, they would need, in addition to this
10 gathering qualifying as an inter-Tribal or in a Tribal
11 gathering, approval by the Makah Tribal Council, the whale
12 products must be consumed by the non-member mother and
13 grandparent at the meal and there would be a weight limit
14 of 2 pounds per non-member. Is that correct?

15 A. Under the previous regulations, that's correct.

16 Q. Now the same limits would apply if a family
17 consisting of only of Makah members invited non-Makah
18 guests to a meal at their off-reservation house and they
19 wished to serve whale products. Is that correct?

20 A. Correct.

21 Q. I'm sorry.

22 A. Correct.

23 Q. Did NMFS consider these situations when it
24 proposed the regulations?

25 A. I think that we have realized that we did not

1 think through those types of situations in the way that we
2 wished we had and thus have proposed revisions to the
3 proposed regulations to accommodate those type of
4 situations.

5 Q. Now, I want to compare the scenarios I described
6 that were all off reservation, to a situation where the
7 same people are gathering on the Makah Reservation. Would
8 any of the restrictions that I mentioned, Council
9 approval, weight limit, non-members must eat or consume at
10 the gathering, would any of those apply on the Makah
11 Reservation?

12 A. Not to my understanding of the regulations.

13 Q. And if the Makah lived off reservation or there
14 was a household of only Makah members that lived off the
15 reservation, none of those restrictions would apply
16 either?

17 A. That's true.

18 Q. Do you agree that the proposed regulations
19 regarding sharing and consuming edible whale product
20 outside the Makah Reservation make it very difficult, if
21 not impossible, for Makahs who live off reservation to
22 share whale meat, blubber and oil with non-Makah members
23 living in their household?

24 A. I agree with that.

25 MR. GRUBER: No further questions, Your Honor.

CROSS-EXAMINATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BY MS. LEWIS:

Q. Good afternoon, Mr. Yates.

A. Good afternoon.

Q. For the record, my name is Elizabeth Lewis, and I represent AWI in this matter.

Mr. Yates, how long have you worked for the Protective Resources at NMFS?

A. I joined Protective Resources of the National Marine Fisheries Service in 2002 as a federal employee.

Q. Okay. And what's your area of expertise?

A. I am a fish and wildlife administer.

Q. So you would consider yourself to be an expert in MMPA and ESA permit issues then?

A. My responsibilities include overseeing the implementation of the Endangered Species Act and the Marine Mammal Protection Act, permits included, yes.

Q. All right. Thank you. Is it correct the contract with the Coast Guard for these ALJ services was entered into in October 2017, which is 18 months before the proposed regulations and waiver were published in the *Federal Register*?

A. I'm not aware of the exact date, but that's certainly possible.

Q. Do you what the cause was of that 18 month delay

1 between the entering of the contract and the actual
2 publication of the proposal in the *Federal Register*?

3 A. We've actually had several contracts with the
4 Coast Guard to secure the services of the Administrative
5 Law Judge. It's a complicated process of administrative
6 requirements and anticipating that we would be proceeding
7 with the proposed waiver, we secured the services of the
8 Coast Guard in advance at that time.

9 Q. Did NMFS notify any parties outside of the
10 agency about when the *Federal Register* notice regarding
11 this waiver proceeding could be expected?

12 A. Not to my knowledge, no.

13 Q. Does NMFS provide any funding to the Makah
14 Tribe?

15 A. I'm unaware of --

16 MS. BEALE: Objection, Your Honor. That's
17 vague. Could you please ask another question?

18 MS. LEWIS: Sure.

19 BY MS. LEWIS:

20 Q. Does NMFS provide any funding to the Makah Tribe
21 that would fund perhaps going to the IWC or furthering the
22 study of the Pacific gray whale population?

23 A. It's certainly possible but that would not be
24 something that I would be aware of in my role. There's
25 various parts of NOAA that work with the Makah Tribe on

1 various issues. So I don't know the answer to your
2 question.

3 Q. Thank you. So is it correct that in order to
4 waive the moratorium, to allow the taking of a marine
5 mammal, NMFS must first determine if the taking is
6 compatible with the purposes and policies of the Marine
7 Mammal Protection Act?

8 A. Yes.

9 Q. So would you agree then that one of these
10 policies and purposes requires NMFS to manage marine
11 mammal stocks so they maintain or achieve their optimum
12 sustainable population levels?

13 A. That's true.

14 Q. So then in order to ensure that the waiver is
15 compatible with the policies and purposes of the statute,
16 NMFS must first make a determination that the subject
17 stock is within the OSP. Is that correct?

18 A. We made that determination for Eastern North
19 Pacific stock.

20 Q. I understand but is that correct as a matter of
21 law that you first -- in order to issue a waiver, you
22 first have to make a determination of the subject?

23 MS. BEALE: I object. Is she asking for a legal
24 conclusion?

25 THE COURT: I could not hear that last part what

1 | you were saying.

2 | MS. BEALE: I believe she asked for a legal
3 | conclusion as a matter of law.

4 | MS. LEWIS: It was actually in several of the
5 | declarations that in order to issue a waiver, NMFS has to
6 | have the data available to make sure that the stock is in
7 | OSP -- within its OSP.

8 | THE COURT: Your answer.

9 | THE WITNESS: The purposes and policies of the
10 | Act are to allow for marine mammal stocks to attain or
11 | maintain OSP. To my knowledge, there is no legal
12 | requirement that the stock actually be at OSP to waive the
13 | moratorium.

14 | BY MS. LEWIS:

15 | Q. So then how is it compatible with its purposes
16 | then to ensure a waiver for a stock that is not within its
17 | OSP?

18 | A. So depending on the scale of the hunts, for
19 | example, two and a half whales each year on a population
20 | of 27,000, has no detectable impact on a stock's ability
21 | to maintain or attain OSP.

22 | Q. I understand.

23 | MS. BEALE: I'd like to object just to clarify
24 | that we're speaking about a hypothetical, correct?

25 | MS. LEWIS: We're speaking about the permitting

1 requirements which Mr. Yates is familiar with.

2 MS. BEALE: To clarify, you're asking him for
3 speculation, correct?

4 MS. LEWIS: I am not asking for speculation. I
5 am asking for what NMFS' permitting requirements are.

6 THE WITNESS: I believe I've answered the
7 question she asked me.

8 THE COURT: What?

9 THE WITNESS: I believe I've answered the
10 question that you just asked me. If not, you need to re-
11 ask your question for me please.

12 BY MS. LEWIS:

13 Q. I'm asking how, if you are to issue a waiver for
14 a stock that is not within OSP, how would that waiver be
15 compatible with the policies and purposes of the Marine
16 Mammal Protection Act?

17 A. So I'll repeat what I -- the answer that I
18 just --

19 MS. BEALE: Asked and answered, Your Honor.

20 THE COURT: I think he started to answer. Let's
21 clarify that question so I can see if it actually has been
22 asked and answered.

23 BY MS. LEWIS:

24 Q. So if a stock is not within its OSP, how it is
25 compatible with the policies and purposes of the Act to

1 | issue a waiver?

2 | A. So the purpose and policy that we're discussing
3 | here is that marine mammal stocks attain or maintain OSP.

4 | Q. Yes.

5 | A. Given the dynamics of the stock in question, and
6 | the proposed waiver, the impact of two and a half whales
7 | on a population this size has no detectable implication in
8 | any manner on meeting that purpose of the Act.

9 | Q. I understand that, but I'm not asking about this
10 | waiver. I am just asking that, is it compatible with the
11 | purpose and policies of the MMPA to issue a waiver for a
12 | stock that is not within its OSP? I understand that the
13 | ENP is within its OSP.

14 | A. It could be depending on the situation at hand
15 | and the information available.

16 | Q. But if the purpose and policies of the Act
17 | require NMFS to recover and maintain OSP, how is it
18 | compatible if you're going to issue a waiver for the take
19 | of a species that is not within its OSP? How is such a
20 | taking compatible with that?

21 | A. So I'll try to answer the question in another
22 | way. There's many marine mammal stocks that are not at
23 | OSP where NMFS authorized the taking consistent with the
24 | purposes and policies of the Marine Mammal Protection Act,
25 | and the analysis is that that taking would not prevent

1 | them from attaining or maintaining OSP. So that is I
2 | think the hypothetical that you're getting at here. So,
3 | yes, a stock that is not at OSP could still have a take
4 | and still attain or maintain its OSP which is the purpose
5 | of the Act.

6 | Q. And what kind of take would that be? Would that
7 | be a take issued under a waiver or incidental take?

8 | A. It could be issued under any of the various
9 | provisions that authorize take under the MMPA.

10 | Q. But you said that there's never been a waiver
11 | issued, is that correct, under the Marine Mammal
12 | Protection Act?

13 | A. Correct.

14 | Q. So any take of a depleted species would either
15 | have to be incidental or it would have to be under the
16 | Alaska native exception which does allow the take of
17 | depleted species as we discussed. Is that correct?

18 | A. So you're mixing a couple of things in there. I
19 | do acknowledge that the agency is prohibited from issuing
20 | a permit for the take of a species that has been
21 | designated as depleted under the Act. That's not the
22 | situation or hypothetical that you were previously talking
23 | about.

24 | Q. Okay. Thank you. So as you've acknowledged,
25 | the western North Pacific stock is listed as endangered

1 | under the ESA. Is that correct?

2 | A. That's correct.

3 | Q. So then it is also considered depleted as that
4 | term is defined. Is that correct?

5 | A. Yes, any animals that are listed under the ESA
6 | are automatically designated as depleted under the Marine
7 | Mammal Protection Act.

8 | Q. So then would it be possible for NMFS to issue a
9 | waiver for the WNP stock?

10 | A. It would not.

11 | Q. Thank you. So is it also correct that the
12 | regulations accompanying any waiver must also ensure that
13 | the taking is consistent with those same policies of the
14 | statute?

15 | A. Could you repeat that question again?

16 | Q. So with the waiver, NMFS also issued proposed
17 | regulations, correct?

18 | A. Yes. If a waiver is granted, then the next step
19 | in the process would be to consider a permit issuance
20 | under those regulations.

21 | Q. Right, and the regulations have to ensure that
22 | the taking is consistent with those same policies and
23 | purposes of the statute?

24 | A. Correct.

25 | Q. Okay. So would you also agree that in

1 | developing those regulations, NMFS has to ensure that the
2 | taking does not disadvantage the population stock?

3 | A. Correct.

4 | Q. Is it true that NMFS interprets the disadvantage
5 | in relation to the impact of a take on the stock's OSP?

6 | A. That is correct.

7 | Q. So then the take of a marine mammal from a
8 | depleted stock is to the disadvantage of that species.
9 | Would you agree with that?

10 | A. A take of a depleted stock would be to the
11 | disadvantage of that stock.

12 | Q. Thank you. So there is no way that NMFS can
13 | issue a permit to take WNP whales. Is that correct?

14 | A. We are not proposing to issue a permit for WNP
15 | whales.

16 | Q. I understand but if you -- there is no way for
17 | NMFS to issue that permit if you were proposing that?

18 | A. I'm not sure what hypothetical -- other
19 | information would be surrounding this question. So I
20 | don't think I can answer that question with the clarity
21 | that you would like me to.

22 | Q. Okay. You mentioned that you may require the
23 | Tribe to seek an incidental take permit though, correct,
24 | for the WNP whales?

25 | A. Part of our proposed regulations require the

1 Tribe to consult with NMFS on any additional MMPA
2 authorizations that may be required for incidental take of
3 other marine mammals.

4 Q. So as I believe we discussed earlier, the Marine
5 Mammal Protection Act defines take to mean, to harass,
6 hunt, capture, or kill or attempt to harass, hunt, capture
7 or kill any marine mammal. Is that correct?

8 A. I believe that's the correct definition.

9 Q. And the Marine Mammal Protection Act further
10 defines harassment to mean any acts of pursuit, torment or
11 annoyance which have the potential to disturb a marine
12 mammal or marine mammal stock in the wild by causing
13 disruption of behavioral patterns?

14 A. Sounds correct.

15 Q. Is it correct that Congress amended the
16 definition of harassment to include a requirement that
17 such behavioral patterns be abandoned or significantly
18 altered but only in the cases involving military readiness
19 activities or scientific research activities conducted by
20 or on behalf of the Federal Government?

21 A. That language sounds correct, but I can't verify
22 its accuracy without seeing something in writing.

23 Q. So then in all other situations not involving
24 military readiness activities or scientific research
25 activities, harassment does not require a showing that

1 | behavior has been significantly altered. Is that correct?

2 | A. I believe that's accurate.

3 | Q. Okay. Would you agree that harassment then
4 | encompasses such acts that have the potential to disrupt
5 | behavioral patterns including migrating, breeding or
6 | feeding?

7 | A. That could be a potential, yes.

8 | Q. So then would you say that acts of pursuit have
9 | at the very least the potential to disturb marine mammals?

10 | A. It would have a potential, not the certainty.

11 | Q. Would you agree that acts of approach have the
12 | potential to disturb marine mammals?

13 | A. Again the potential, not the certainty.

14 | Q. Would you agree that (indiscernible) marine
15 | mammals has at the very least the potential to disturb
16 | marine mammals?

17 | A. I would agree with that.

18 | Q. Would you agree that harassment encompasses the
19 | attempt to engage in such acts as the statutory definition
20 | provides?

21 | A. Again, that sounds correct but I'm not sure
22 | whether the word attempt is in the actual statute or
23 | regulations.

24 | Q. So then those three acts that I just named,
25 | pursuit, approach and throwing things at marine mammals,

1 | those would constitute take under the Marine Mammal
2 | Protection Act?

3 | A. They could.

4 | Q. So would you also agree that hunting a marine
5 | mammal constitutes take as defined in the Marine Mammal
6 | Protection Act?

7 | A. Yes.

8 | Q. Is it correct that attempting to hunt a marine
9 | mammal constitutes take as defined in the Act?

10 | A. I believe that's accurate. Again, I don't have
11 | the language in front of me here to verify.

12 | Q. Okay. When you agree that a fair definition of
13 | hunt means to pursue for food?

14 | A. That could be one definition.

15 | Q. That's the Merriam Webster definition for the
16 | record. Is hunting an accidental act?

17 | A. I would posit not. I wouldn't anticipate that
18 | hunting would be an accidental act.

19 | Q. So would you agree the Makah proposing to pursue
20 | the marine mammals for food as we just discussed here,
21 | meets the definition of hunting?

22 | A. The Tribe's request was to hunt Eastern North
23 | Pacific population of gray whales, yes.

24 | Q. So then the Tribe is proposing to take marine
25 | mammals by hunting or attempting to hunt?

1 A. Yes.

2 Q. So is it true that an unpermitted take is
3 strictly limited by the Marine Mammal Protection Act?

4 A. Unauthorized take of marine mammals is
5 prohibited by the Marine Mammal Protection Act, yes.

6 Q. Would you agree that a take is either incidental
7 or intentional?

8 A. I would agree that those two categories are how
9 we evaluate take, yes.

10 Q. Is it correct that an incidental take is defined
11 in the statute and the regulation as a take that is not
12 intentional or one that is accidental?

13 A. Again, I don't have the language in front of me.

14 MS. LEWIS: It's at 50 C.F.R. Section 216.103
15 for the record.

16 BY MS. LEWIS:

17 Q. Would you agree that intentional harassment
18 falls outside the definition of incidental take?

19 A. Intentional harassment?

20 Q. Um-hum.

21 A. I would think that that falls outside because if
22 they were intentionally harassing a marine mammal without
23 authorization, correct.

24 Q. So intentional pursuit falls outside the
25 definition of incidental take as well?

1 A. If they're intending to pursue a marine mammal
2 upon which they have no authorization, I would say that
3 that would fall outside the scope of incidental.

4 Q. So then would you agree that intentional hunting
5 falls outside the definition of intentional take?

6 A. Yes.

7 Q. So at paragraph 29 of your third declaration,
8 you note that Makah Tribe may be required to "obtain
9 authorization under the MMPA for incidental take of WNP
10 gray whales prior to the issuance of a hunting permit."
11 Can you explain how the intentional pursuits of WNP gray
12 whales constitutes non-intentional or accidental take?

13 A. Under our proposed regulations, the Tribe would
14 not be intentionally pursuing western North Pacific gray
15 whales. They would be pursuing -- if we waive the
16 moratorium and issue a permit, they would be pursuing
17 Eastern North Pacific gray whales upon which we would have
18 issued a permit, and we evaluated the potential of an
19 unintentional pursuit or strike of western North Pacific
20 whales that may be in the area of their hunt.

21 Q. But isn't it also true then that NMFS does
22 interpret the Marine Mammal Protection Act to be a -- in
23 the line of strict liability to be subjective intent of
24 the person who is conducting the act does not matter?

25 A. I'm not a lawyer. So I can't answer that

1 question.

2 Q. All right. Thank you. Is it correct that at
3 least 30 WNP whales are known to migrate to the western
4 coast of the United States including 2 that have migrated
5 through the Makah Tribe's U&A?

6 A. Dr. Weller could give you the exact numbers but,
7 yes, we know that western North Pacific gray whales
8 migrate through the Makah U&A.

9 Q. In paragraph 25 of your third declaration, you
10 state that NMFS currently recognizes the so-called Western
11 Feeding Group, which i.e. those whales that migrate to
12 western coast of the United States, as part of the WNP
13 stock. Does this conclusion represent the best available
14 science?

15 A. The most recent stock and assessment report
16 represents the best available science that describes the
17 feeding groups that comprise the WNP stock.

18 Q. Are members of the WNP stock readily
19 distinguishable from members of the ENP stock?

20 A. They are not.

21 Q. Would you agree that it would be impossible to
22 obtain photographs of sufficient quality to identify the
23 individual whales in a hunt situation?

24 A. I don't know that that's true but it would
25 certainly be difficult.

1 Q. So is it generally correct, would you agree that
2 identification of whales taken over the course of the hunt
3 will occur after the taking has occurred and only if the
4 whale is successfully landed?

5 A. That is generally true. We would work to obtain
6 photographs of any struck whale but certainly a landed
7 whale provides much more opportunity to obtain the quality
8 photographs that you would need for matching.

9 Q. Will you be able to identify every whale that is
10 subjected to an unsuccessful strike attempt or training
11 throw?

12 A. We would not.

13 Q. And isn't it true that if you were able to
14 identify such whales, that identification would only occur
15 after the taking has occurred?

16 A. That's is true.

17 Q. So would the pursuit of a whale for ID purposes
18 constitute take under the MMPA?

19 A. It would depend on what that pursuit entailed
20 and the behavioral reaction of the whale.

21 Q. Has the proposed regulations entirely eliminated
22 the risk that the hunt poses to WNP whales?

23 A. They have not, but it's very remote.

24 Q. Would you agree that the regulations balance
25 protections for WNP whales and protections for PCFG whales

1 meaning that the proposed waiver still imposes a risk that
2 WNP whales will be taken?

3 A. We believe that our proposed regulations balance
4 those two conservation objectives and that there is a risk
5 but as I mentioned, it's very small.

6 Q. What is the risk of at least 1 WNP whale will be
7 approached over the 10 year waiver period?

8 A. I can't recall the exact probability of
9 approaches. Dr. Moore would be able to illustrate that
10 for you when he describes his modeling effort.

11 Q. In Exhibit 4-15 at page 12 of Dr. Moore's
12 declaration, he states the probability that at least 1
13 will be approached as 100%. Would you agree with that?

14 A. If that's from Dr. Moore's exhibit, I certainly
15 would.

16 Q. Do you know the risk that at least one WNP whale
17 will be subject to a strike attempt or a training harpoon
18 throw?

19 A. I do know that we estimate that for any
20 individual strike, which would also be the same for any
21 individual harpoon throw, that the probability of it being
22 a western North Pacific gray whale is about 1/2 of 1%.

23 Q. What about over the course of the 10 year period
24 that at least 1 whale will be subjected to either a strike
25 attempt or a training harpoon throw?

1 A. Sure. Again, we have limits on the strikes of 3
2 per year which over the 10 year waiver would be 15
3 potential strikes, and then the harpoon training throws
4 during those even year hunts, I can't recall the exact
5 calculations that Dr. Moore provided in his document.

6 Q. On that same page, he provided a probability of
7 about 36%. Would you agree with that?

8 A. Again, if Dr. Moore said that, I would agree
9 with it.

10 Q. Thank you. So the unusual mortality event of
11 the gray whales was -- the ENP stock gray whales was
12 declared in May 2019. Is that correct?

13 A. Correct.

14 Q. Would you agree that the UME has not been
15 declared to be over?

16 A. Correct.

17 Q. Do you know the percentage of stranded whales
18 that have been subjected to a full necropsy?

19 A. I don't know the percentage of whales that have
20 been subject to a full necropsy. There's whales in
21 Canada, United States and Mexico and certainly within the
22 United States, we're doing our best to gather up the
23 information that we can to assess any potential impacts or
24 causes of the UME.

25 Q. Certainly. Do you know what percentage of

1 | stranded whales have had samples taken, and I'll just
2 | limit that to the United States since you mentioned that
3 | there are other jurisdictions on that list as well?

4 | A. Samples taken in terms of biological samples or
5 | particularly what samples are you talking about?

6 | Q. Biological samples for identification of
7 | genetics to place the whales?

8 | A. Yeah, my understanding from the briefing I
9 | received yesterday and this morning is that a little over
10 | 50 whales, we believe we have genetic samples on a little
11 | over 50 whales out of the 214 that we have stranded thus
12 | far.

13 | Q. Thank you. The same question but in regard to
14 | photographs or for photo ID purposes?

15 | A. Yeah, again my understanding is that we have
16 | around 118 photographs from whales that have stranded in
17 | the United States, around 70 whales from Mexico. So
18 | that's approaching 200 animals out of the 214. We're
19 | unsure about whether photographs of the Canadian whales
20 | have been taken. So whether those photographs are all
21 | adequate for photo ID matching or not, is to be
22 | determined. My understanding is that we've attempted to
23 | match about 40 of those whales to the photo ID catalogs.

24 | Q. Thank you. What is cryptic mortality?

25 | A. Cryptic mortality is mortality that you do not

1 | see or document.

2 | Q. And can you state again what percentage of
3 | whales are lost to cryptic mortality?

4 | A. So the best available science and recent
5 | published literature estimates that for whales, gray
6 | whales along the coast of North America that we see about
7 | 3.9 to 13% of those whales as stranded animals.

8 | Q. In paragraph 4 of your fifth declaration, you
9 | note that it is, "premature to speculate as to the
10 | potential causes, severity, or duration of the UME."
11 | Would you agree then that NMFS does not know the full
12 | extent of this UME?

13 | A. We do not.

14 | Q. Would you also agree that NMFS does not know
15 | whether and how the UME has affected the PCFG population?

16 | A. We do not.

17 | Q. Is it possible that UME has affected the PCFG
18 | population?

19 | A. It's certainly possible. As I mentioned
20 | previously, in my earlier testimony, we have a photo ID
21 | match to one PCFG animal. So that's the information that
22 | we were able to obtain from the individual animals.

23 | Q. So the UME could possibly still be affecting the
24 | PCFG population?

25 | A. It certainly could. Again, I'll note that the

1 information we have from the last UME was the PCFG
2 population actually increased during that UME.

3 Q. Yes, but the causes of the events could be
4 different?

5 A. Absolutely, correct.

6 Q. Thank you. Would you agree that the polices and
7 purposes of the Marine Mammal Protection Act have
8 requirements to ensure that marine mammals do not cease to
9 become a functioning element of the ecosystem of which
10 they are a part?

11 A. I would agree.

12 Q. So you also agree that the primary objective of
13 marine mammal management or the MMPA is to maintain the
14 health and stability of the marine ecosystem?

15 A. Correct.

16 Q. So in paragraph 7 of your fourth declaration you
17 state that NMFS will monitor the unusual mortality events
18 prior to issuing the waiver. Will NMFS issue a waiver
19 during the duration of the UME?

20 A. We certainly are doing our best to try to
21 evaluate and understand the cause of the UME and to assess
22 each individual animal to the extent we can to better
23 determine it. And we will continue to understand the
24 impacts of the UME on the population through the surveys
25 that I mentioned earlier which is a much more certain way

1 of understanding what the UME is doing -- what impact the
2 UME has had on the ENP stock or the PCFG stock. So we
3 will evaluate all the information available to us before
4 we would proceed with a waiver or issue a permit.

5 Q. But NMFS may issue a waiver during the duration
6 of the UME?

7 A. I would say that it's possible.

8 Q. Given that 14 years have passed since the Makah
9 Tribe first applied for a waiver, isn't it true that
10 delaying a final determination on the waiver application
11 pending the conclusion the UME would constitute only a
12 modest delay in the overall process?

13 A. I'd say that modest is in the eye of the
14 beholder and leave it at that.

15 Q. If NMFS delays a final determination of the
16 waiver application until the UME is concluded, isn't it
17 correct that you would have new information about the post
18 UME status of the ENP and PCFG gray whale populations
19 including those revised population estimates, calculating
20 the PBRs?

21 A. I would say that we're going to have a revised
22 understanding of the overall abundance of ENP stock and
23 PCFG stock through the annual surveys that are currently
24 ongoing and will be ongoing again next summer for PCFGs.
25 So while we would like for the UME to be over quickly and

1 Q. You know that I disagreed with your decisions
2 for many, many years, but just going from what I've heard
3 today -

4 (Feedback, mic/audio problem.)

5 MS. PRUETT: Thanks, Margaret.

6 MS. OWENS: I am sorry. Was that me?

7 THE WITNESS: I'm not sure how to answer that
8 question.

9 MS. OWENS: Was that me?

10 THE WITNESS: I don't think so.

11 BY MS. OWENS:

12 Q. Okay. So I apologize for not being prepared,
13 Just based on what you've gone over today, I think you're
14 disregarding the disproportionate effect the take will
15 have on our local Makah U&A whales which is a sub-portion,
16 so to speak, of the 200. It's a much lower, smaller
17 number that generally between years has site fidelity to
18 the Straits of Juan de Fuca, the Puget Sound area and the
19 Salish Sea.

20 Those of us who live along the shores of the
21 Salish Sea feel that we almost know these whales. They
22 come to this sea. It's the same ones returning this year,
23 that year, to Crescent Bay, to Deep Creek, to, you know,
24 the places where there's food along the straits, where
25 people can observe them. We're very sure that there will

1 | be a disproportionate take from this small group of whales
2 | with your plan. As precautionary as you feel it is, we
3 | strongly disagree.

4 | I also don't understand why in your analysis of
5 | impact to an ecosystem while you only focused on the outer
6 | coast and are able to easily say that the take will have
7 | no impact on the ecosystem of the California current, you
8 | know, ecosystem, there will be no impact by this
9 | relatively small take.

10 | But I just want to know if you considered the
11 | Salish Sea. You didn't point it out with the laser
12 | pointer. You kept your pointer on the coast. You didn't
13 | follow the PCFG whales into the strait, all the way in,
14 | all the way past Port Angeles to all the little places
15 | that we local people know that the local whales come to
16 | regularly with calves some years. They're documented in
17 | the hearts and minds of the people who live along the
18 | strait, and in some cases, really documented with
19 | citizen's science of observation.

20 | So my question is why did you not consider the
21 | removal, probably and outsized removal from our group
22 | which are basically the sitting duck whales? Why the
23 | removal will not affect the ecosystem of the Salish Sea
24 | which is very different from the California current
25 | ecosystem? It's a coastline with river mouths and bays

1 and quieter waters where the near shore areas used by the
2 gray whales are also the migratory paths of endangered
3 species of young salmon. You know, the entire food web is
4 represented along the strait.

5 THE COURT: Let him answer the question. I know
6 you're very emotional about this, but it's -- can you ask
7 it? Basically I'm understanding the question to be why
8 didn't you consider the Salish Sea?

9 BY MS. OWENS:

10 Q. Why didn't you consider the impact to the Salish
11 Sea ecosystem?

12 A. So let me start a bit, and I just want to say,
13 Margaret, thank you for your questions and we, including
14 myself, have deep respect for your longstanding interest
15 and concern for the whales and understand that this is a
16 difficult proposal for you. And so we certainly want to
17 acknowledge and respect that.

18 We did analyze the impact of removing animals at
19 varying levels both in terms of the impact to the
20 ecosystem and also the impact of whales in that area. So
21 we analyzed that the Northern California current ecosystem
22 level, we analyzed that the scale of the Northern
23 Washington coast which coincides with the Makah U&A, those
24 analyses determined that the removal, those limited number
25 of animals, would not have any effect on the ecosystem and

1 that, yes, some of the whales, certainly the whales from
2 that area are the ones that are going to be removed. So
3 that's what the hunt is proposing.

4 However, there's varying different whales that
5 go in and out of there. Some of them show more site
6 fidelity than others. Over the past few years, there's
7 been documented up to 100 different PCFG whales. We know
8 that the PCFG whales move up and down the coast annually
9 and inter-annually, in and out of areas, depending on
10 ecosystem and food conditions.

11 And so while we recognize that some of the
12 whales that you and other citizens have seen or are
13 accustomed to seeing may be ones removed, our
14 determination is that that would not impact the overall
15 abundance of whales or the ecosystem in those areas.

16 To answer your more specific question, we did
17 not extend that analysis into the Salish Sea. That
18 analysis was for the Northern California current
19 ecosystem, is the smallest recognized ecosystem that
20 comprised the PCFG area and the Makah U&A and then the
21 Makah hunt area itself.

22 Q. I disagree. You say that the outer coast
23 portion is the smallest portion. Are you saying that
24 because the Salish Sea is a larger portion?

25 A. No, what I was saying was that, you know, of the

1 area that we analyzed, including the coastal portion of
2 the Makah U&A that was the smallest level of analysis that
3 we did in the environmental impact statement in our
4 proposed regulation.

5 Q. So why didn't you analyze the effect of removing
6 annual lethal removal that will particularly target -- I
7 mean they're meant to target our resident whales in the
8 summer. That's who's there. There's not 100 whales, you
9 know, every year in this Strait. I mean just because
10 you've ID'd a particular whale in a year, that doesn't
11 mean they're one of the regulars, and there's a very
12 beloved group of whales that Puget Sounders that are part
13 of the ENP, that come in so faithfully and have so many
14 followers up in Puget Sound, you must know all about them.
15 They're endangered, too. They're a small group. They
16 must have a big impact on the systems up there where they
17 eat the shrimp for months and months at a time. They
18 return like the swallows of Capistrano. I mean they're
19 always there, and you start removing them.

20 You start removing the mothers at a rate of --
21 you only value the mothers at an equal rate to the males.
22 That's another thing I don't understand. Eight out of 16
23 can be females. That's not giving any extra credit to the
24 females for bearing the next generation and it's those
25 mothers' memories of their mothers bringing them to these

1 | little places that can just be extirpated by taking out
2 | one mother, two mothers.

3 | Just why is it fair to give equal weight to male
4 | and female? Why is that precautionary in any way?

5 | A. Well, our precaution with the male/female limits
6 | on PCFG was to ensure that in a population where the best
7 | available science indicates that it is a 50/50 male/female
8 | ratio within the population, that a removal of 16 animals
9 | would take no more than half of those removals and that it
10 | would not disproportionately affect females. So that was
11 | the precaution that we included for the male/female ratio.

12 | Q. I think that because the females have
13 | disproportionately greater value to the future of these
14 | whales, that 50/50 is a bum deal. And I think you should
15 | have analyzed the impact to the Salish Sea. It's a
16 | vulnerable inland sea with a lot of problems. The gray
17 | whales are the only baleen whales in the near shore that
18 | are plowing and sifting and bringing nutrients up to the
19 | water column and leaving their waste to feed everything.
20 | They're very valuable parts of a fragile ecosystem that's
21 | in grave danger.

22 | We all know the plight of the resident orcas,
23 | you know, and we cry for them, too, at their losses but
24 | our resident gray whales are just as important to us.
25 | They're as important to us and have as great value as the

1 | western Pacific whales. The populations are about the
2 | same size. The fact that you have refused to designate
3 | the PCFG as a stock, which would hopefully give some
4 | additional protection than what you're giving here, is
5 | just not fair.

6 | And you -- all these years, I can go back in my
7 | archives 20 years ago, you know, you just didn't know if
8 | it's a stock or not a stock. It seems so deliberate
9 | because if you designate the PCFG as a stock, that makes
10 | it really hard to have a near shore hunt.

11 | That's why many of us who don't want any whales
12 | to experience the torturous death that they will be
13 | experiencing every year, year after year after year, we
14 | would be slightly eased by an offshore hunt that would
15 | protect our resident whales, would protect the mothers and
16 | calves on the coast in the spring where they're trying to
17 | nurse and protect their babies. If they're going to be
18 | disrupted by all these approaches and activities and
19 | things thrown at them --

20 | THE COURT: We understand that. Ma'am, this is
21 | a speech. Unfortunately you're not -- this is supposed to
22 | be cross-examination right now. You have your statement
23 | and we'll be -- later in this proceeding, we'll be taking
24 | your statements. And we will gladly accept everything at
25 | that time, but right now, I'm trying to limit this to

1 cross-examination, brief questions to the witness if
2 you've got any other ones.

3 BY MS. OWENS:

4 Q. I just don't feel I got an answer as to why the
5 Salish Sea wasn't analyzed as a habitat that would be
6 impacted by the removal of the gray whales.

7 A. So I would ask you to ask that question of Dr.
8 Weller. I am unaware of the overlap of the whales that
9 are referred to as Sounders that go into the Sound, with
10 whales occurring in the Makah U&A. I'm well aware of the
11 whales both in the Strait and the U&A, are whales that are
12 the same and seen frequently. I'm unaware of the overlap
13 of the whales that enter the Sound, those limited animals
14 that go and feed on the shrimp and on their way migrating
15 north. So I'd ask if you could ask Dave Weller that
16 question --

17 Q. I will.

18 A. -- because I'm not able to answer that question.

19 Q. I will. I apologize for going soap box.

20 THE COURT: That's all right.

21 MS. OWENS: I'm sorry. Thank you very much.

22 A. Thank you, Margaret.

23 THE COURT: You'll have your opening a little
24 bit later. Are there any other questions for this witness
25 at this time? All right.

1 MR. GOSLINER: Hi, Michael Gosliner representing
2 the Marine Mammal Commission.

3 **CROSS-EXAMINATION**

4 BY MR. GOSLINER:

5 Q. Mr. Yates, in the most recent stock assessment
6 for the Eastern North Pacific gray whales, there's a
7 statement that says, "The status of the PCFG as a
8 population stock remains unresolved," and then talks about
9 workshops and taskforces. Can you briefly explain if
10 there are any -- what plans does NMFS have and what
11 timeframe are they looking at to try and resolve this
12 issue further?

13 A. Well, I think the references are in the history
14 there of the convening of the taskforce in 2012. I would
15 say that our plans are that we are continually gathering
16 new scientific information. We are committed to
17 discussing that in the development of each SAR within the
18 scientific review group. We currently have no additional
19 plans to convene a new taskforce since there is, to my
20 knowledge, no prompting scientific new information that
21 would add new light to this question.

22 Q. So are there any plans to collect additional
23 information that you're aware of or that it will appear
24 when it appears?

25 A. Well, we, and our partners, are both funding and

1 | conducting surveys, photo ID surveys, taking genetic
2 | samples, each summer as I mentioned before which is adding
3 | to the knowledge base of the dynamics of the Pacific Coast
4 | Feeding Group. It's my understanding that we're learning
5 | a little bit more each year as we understand both changes
6 | in our understanding of internal and external recruitment.
7 | Certainly society is advancing its genetic capabilities
8 | quite rapidly, and we are surely poised to take advantage
9 | with our expertise of using those new tools and
10 | understandings to continue to further look at whether PCFG
11 | meets the Marine Mammal Protection Act definition of a
12 | stock or not.

13 | Q. In your initial declaration, there is an exhibit
14 | attached to that that talked about monitoring of the
15 | continuation of photo ID work, and what have you. Can you
16 | briefly summarize what your plan is to continue to have a
17 | robust photo ID catalog for the PCFG?

18 | A. Absolutely. And as I noted earlier, it was one
19 | of the research recommendations from the IWC Scientific
20 | Committee, when they reviewed our hunt management plan,
21 | that it was contingent upon continuing to have a robust
22 | survey conducted to understand the abundance the mixing
23 | proportions. So our agency funds partners and conducts
24 | our own survey efforts to further improve photo ID
25 | catalogs. In particular, Cascadia, our research

1 collective, is the principal partner along with many
2 others including the Makah Tribe that contributed to that
3 catalog. And obviously Dr. Weller can give you more
4 information, but it's my understanding that for western
5 North Pacific whales, photo ID also continues.

6 So certainly the ability to have adequate photo
7 ID catalogs, have them available to us, is a key component
8 of the hunt, and that's why it's one of our requirements
9 that we've proposed to set forth for ourselves, to
10 affirmatively answer before we can issue a permit under
11 these proposed regulations.

12 THE COURT: Excuse me. Before you go further, I
13 just want to be sure, you're talking -- are you referring
14 to the NMFS protocol for monitoring Makah whale hunts from
15 December of 2018?

16 THE WITNESS: Judge that is our protocol of how
17 we would propose to use photo ID in our monitoring
18 component of managing this hunt. I was trying to refer to
19 Mr. Gosliner's question about what are we doing to further
20 develop photo ID catalogs which I thought was the
21 question, but maybe I misinterpreted it.

22 BY MR. GOSLINER:

23 Q. Or to maintain that.

24 A. Or to maintain them, yeah. My short answer is
25 we fund and other partners are gathering photos every

1 year.

2 Q. Can you talk further about the western North
3 Pacific? You do not fund that and what influence do you
4 have to ensure that that catalog stays current and
5 adequate?

6 A. That is also my understanding is that NMFS
7 currently does not provide funding for the western North
8 Pacific photo ID services. But certainly Dr. Weller who
9 has been involved in that for decades would be able to
10 give you a more in depth understanding of our certainty of
11 those photo ID surveys continuing.

12 Q. And do you have any contingencies or thinking
13 about any contingencies if the adequacy of those catalogs
14 are not kept up to current standards?

15 A. Well, certainly we've created incentive for the
16 agency and for the continuation of this hunt because we
17 will be unable to issue a permit if we determine that
18 those photo ID catalogs are not adequate. So I guess the
19 best answer to your question is I don't know of any
20 specific plans. Dr. Weller may but this hunt, if, as
21 proposed, if approved certainly provides an additional
22 motivation other than our just conservation concern and
23 interest in continuing to understand the WNP population.

24 Q. Okay. Let me switch gears for a little bit. In
25 your testimony earlier this afternoon, you talked about

1 | the abundance floor for PCFG whales where hunting would
2 | stop. They got certain floors and that is kind of an
3 | on/off switch that you're --

4 | A. It is.

5 | Q. -- able to hunt.

6 | A. It is. You know, our conservation objective was
7 | to maintain, to ensure that the hunt would not impact the
8 | Pacific Coast Feeding Group population in a way that would
9 | cause it to fall below its recent stable level since the
10 | turn of the century. So we did set the 192 animals which
11 | was the level in 2007 with an end min of 171. If any of
12 | the abundance surveys indicate that the population was
13 | below that level or are predicted to fall below that
14 | level, the hunt would cease.

15 | Q. And did you give any consideration to having
16 | kind of a dimmer switch instead of an on/off switch where
17 | you would slow the harvest if you declined by a certain
18 | amount before you hit those floors?

19 | A. We certainly did. In particular, since that was
20 | a recommendation from the Marine Mammal Commission which
21 | we take very seriously, I think our assessment of that was
22 | that that is already such a conservative level that we
23 | were intending and committed to attain that we decided to
24 | stick with just kind of the on/off level of population
25 | thresholds for PCFG.

1 Q. In light of the previous UME, the ongoing UME
2 and potentially future UMEs, I guess in the world of UMEs,
3 we're lucky that so far we're at about a 20% reduction,
4 maybe in the last analysis of that, a 20% reduction. Have
5 you thought about including any sort of overall abundance
6 floor that, if there were a more significant population
7 reduction in the overall ENP population or abundance, that
8 hunting should slow or be suspended temporarily until the
9 population regrows?

10 A. We considered setting some abundance threshold
11 for the overall ENP population similar to what we've done
12 for the PCFG. As I mentioned earlier, the population is
13 so large and so robust that to determine that number of
14 when a take of two and a half whales would actually be
15 detrimental to the population is a substantially lower
16 abundance than what we're experiencing or what we could
17 reasonably predict as a result from this UME. So we rely
18 on our duration of the waiver of 10 years and our ability
19 to manage permits if we so choose on a year-by-year basis
20 as an alternative mechanism of making those decisions in
21 light of uncertainty and potential continuation of the
22 UME. So we did not set a low abundance threshold for the
23 ENP that would turn off the hunt.

24 Q. Okay. And I think AWI asked this question but I
25 think they asked it in a slightly different way. So I'm

1 going to ask you I think more of a clarifying question.
2 And this is the number -- do you know the number of the
3 UME whales where you actually had an identifiable whale?
4 And I think you suggested that 40 had gone forward, but
5 that's -- so just to clarify, that's 40 where you had a
6 whale but wasn't so decomposed or anything else that you
7 actually had a shot at --

8 A. Correct. So we have somewhere around 200 out of
9 the 214 whales have some degree of photo identification
10 taken. Fifty some of those have some genetic information
11 taken. It's my understanding that preliminary photo ID
12 against the PCFG catalog for principally animals from
13 Oregon and Washington have been conducted, and none of
14 those matched identified PCFG animals. However, the most
15 recent stranded whale, number 214, is a stranded whale
16 from California that we did match to the PCFG catalog. So
17 I'm not sure if that answers your specific question. We
18 have most of those photo ID'd and if we understand what
19 happened in Canada, perhaps almost all of them. To what
20 degree those photos are going to be adequate to do matches
21 against PCFG catalog and the WNP catalog, and we have not
22 started any matching on the WNP catalog.

23 Q. And how quickly have those photo matches been
24 done, the ones that you've been able to do?

25 A. I'm not aware of how long those have taken.

1 Obviously we're working with partners at Cascadia to
2 prioritize and implement those matches. And it certainly
3 is important to do that and we hope to learn something
4 from that in terms of the overall impact as I mentioned
5 before. We're going to principally rely on the surveys
6 that are going to tell us what the status of the overall
7 population abundance is, as our way of evaluating what the
8 impact of the UME has or has not been on the ENP
9 population, WNP population and the PCFG population.

10 Q. And they're using the same photo matching
11 protocols and priorities that you would use for a landed
12 whale from the Makah hunt? Basically the question is it's
13 a model of how quickly we might --

14 A. Sure. Yeah. I would assume so, but I'm not
15 aware of exactly what the different protocols are between
16 a landed whale and a whale taken at sea. I think that's
17 some of the challenges of matching them, but as we
18 document in our proposed regulations and in our
19 declarations, we have in our discussions with Cascadia
20 Research Group, they have assured us that they have
21 confidence that they can do a photo ID match within a 24
22 hour period.

23 Q. And would you expect a similar turnaround in
24 time for a western North Pacific whale as you would for a
25 PCFG?

1 A. I would, and that would certainly be a priority.
2 The hunt would be stopped until such time as we determined
3 whether that animal matched any of the individuals in the
4 WNP catalog. So it would certainly be a priority to get
5 that photo identification done quickly.

6 MR. GOSLINER: Thank you. No further questions.

7 THE COURT: All right. Redirect?

8 MS. BEALE: Your Honor, can we have a break?

9 THE COURT: You want a break beforehand?

10 MS. BEALE: Yes.

11 THE COURT: I was going to suggest that. If you
12 have redirect, we'll take a 10 minute break before we
13 begin redirect. Thank you. We're in recess.

14 **(Off the record from 2:59 p.m. to 3:17 p.m.)**

15 THE COURT: Okay. We're back on the record in
16 the matter of regulations governing the taking of marine
17 mammals.

18 **REDIRECT EXAMINATION**

19 BY MS. BEALE:

20 Q. Good afternoon. Again this is Laurie Beale for
21 the National Marine Fisheries Service. Mr. Yates, I would
22 like to ask you just a couple of clarifying questions.
23 You were asked a number of different hypothetical
24 questions about waivers, permits and takes for stocks,
25 then on OSP or depleted. And the one question you were

1 asked was if taking of a marine mammal from a depleted
2 stock would disadvantage the stock and you answered that a
3 take would be to the disadvantage of that stock. Would
4 you like to clarify that answer?

5 A. Yes, I would. Taking of a stock that has been
6 designated as depleted may not be to the disadvantage of
7 the stock. It certainly depends on the status of that
8 stock and the type of take being considered. A perfect
9 example would be that the agency certainly does issue
10 research permits which take depleted marine mammal stocks.
11 So that's one example of how a take could be authorized of
12 a stock that has been designated as depleted.

13 Q. Mr. Yates, under the proposed waiver, would
14 hunting occur anywhere within the Salish Sea?

15 A. It would not.

16 MS. BEALE: That's all I have, Your Honor, no
17 further questions. Thank you.

18 THE COURT: All right. Is there any recross on
19 the redirect?

20 MR. SCHUBERT: No, Your Honor.

21 THE COURT: Okay. Thank you very much. Sir,
22 you're excused.

23 **(Witness excused.)**

24 THE COURT: NMFS, you may call your next
25 witness.

1 MS. BEALE: Yes, Your Honor. NMFS would like to
2 call Ms. Shannon Bettridge to the stand.

3 THE COURT: All right.
4 (Whereupon,

5 **SHANNON BETTRIDGE, Ph.D.**
6 was called as a witness and, after having been first duly
7 sworn, was examined and testified as follows:)

8 THE COURT: Please be seated.

9 MR. IMAKI: For the record, I'm Caitlin Imaki.
10 I represent the National Marine Fisheries Service.

11 **DIRECT EXAMINATION**

12 BY MS. IMAKI:

13 Q. Dr. Bettridge, could you please state and spell
14 your name for the record?

15 A. My name is Shannon Bettridge, S-h-a-n-n-o-n, B-
16 e-t-t-r-i-d-g-e.

17 Q. And what is your current address?

18 A. My work address is 1315 East West Highway,
19 Silver Spring, Maryland 20910.

20 Q. And, Dr. Bettridge, where are you currently
21 employed?

22 A. I work for NOAA Fisheries, Office of Protective
23 Resources.

24 Q. And what is your current title?

25 A. I am the Chief of Marine Mammal and Sea Turtle

1 Conservation Division.

2 Q. How long have you worked for NOAA Fisheries in
3 that role?

4 A. I've worked for NOAA Fisheries since April 2006,
5 and I've been officially in my current capacity since
6 April of 2018.

7 Q. And what are your major duties?

8 A. So I oversee implementation of the Endangered
9 Species Act, the Marine Mammal Protection Act and
10 conservation and recovery activities related to marine
11 mammals and sea turtles.

12 Q. Dr. Bettridge, have you participated in NOAA
13 Fisheries development of the proposed rule and regulations
14 that are the subject of this hearing?

15 A. Yes, I have.

16 Q. In what way?

17 A. In my capacity related to my knowledge of the
18 Marine Mammal Protection Act, specifically Section 117 as
19 it relates to marine mammal stock assessment reports and
20 scientific review groups.

21 Q. Again, what section of the Marine Mammal
22 Protection Act is that?

23 A. Section 117.

24 Q. 117. Thank you. Dr. Bettridge, what
25 declaration did you submit in support of NOAA Fisheries

1 | proposed rule and regulations?

2 | A. I submitted three different declarations. My
3 | initial declaration, a rebuttal and then another
4 | declaration related to the unusual mortality event.

5 | Q. And for the record, would you please generally
6 | describe your academic scientific or technical training
7 | that qualifies you to opine on the contents of your
8 | declaration?

9 | A. Certainly. I have a bachelor's, master's and
10 | doctoral degree in environmental policy. I have expertise
11 | in the Marine Mammal Protection Act, and I've been the
12 | national coordinator of marine mammal stock assessment
13 | reports and scientific review groups for about 10 years
14 | now.

15 | Q. Next, I'd like to ask you to summarize three
16 | aspects of your testimony. First, could you briefly
17 | explain the nature of a stock assessment report that's
18 | commonly referred to as a SAR or S-A-R?

19 | A. Sure. So Section 117 of the Marine Mammal
20 | Protection Act directs NMFS and the Fish and Wildlife
21 | Service to develop marine stock assessment reports for all
22 | marine mammals that are within the U.S. jurisdiction.
23 | Those stock assessment reports contain information related
24 | to the geographic range of the stock, provide minimum
25 | abundance estimates, an estimate of the maximum net

1 productivity level, trend where available, an estimate of
2 potential biological removal, an estimate of human caused
3 mortality and serious injury by source, a description of
4 all fisheries that interact with those stocks. One more,
5 a description of the status of the stock relative to OSP
6 and strategic status.

7 Q. Who plays a role in development of a SAR?

8 A. So SARs are typically written by experts in each
9 stock at the science centers. The preliminary drafts are
10 then reviewed within the science centers and then reviewed
11 by staff at the relevant regional office as well as
12 headquarters staff. Those preliminary drafts are then
13 reviewed by our scientific review groups. Scientific
14 review groups are established by the Act under 117 as
15 independent advisory bodies with expertise in the field.
16 They conduct review of our preliminary drafts and their
17 review is considered a peer review of that information.

18 Once the scientific review groups have done
19 their peer review of our drafts, we incorporate comments
20 and address them. Then it goes back through review at the
21 centers and then headquarters and regional offices. And
22 then they're out for public comment. By statute that
23 comment period is a 90 day comment period. Typically we
24 receive comments from NGOs, other federal agencies
25 including the Marine Mammal Commission and individuals.

1 We will then address those public comments, finalize the
2 documents which are again reviewed at the centers and
3 regional offices and headquarters and they are finalized
4 along with a *Federal Register* notice responding to every
5 relevant and significant comment.

6 Q. How long does that process typically take?

7 A. Longer than we'd like. Typically they take
8 about one year to go through the whole cycle.

9 Q. Does NMFS consider these SARs to be best
10 available science?

11 A. Yes, we do.

12 Q. I'd like to turn next to the description in your
13 declaration regarding the most recent SAR for gray whales.
14 When was that latest SAR finalized for gray whales?

15 A. The latest SAR was finalized in June of 2019 and
16 those are what we refer to as 2018 final stock assessment
17 reports.

18 Q. What does the latest SAR say about the
19 population abundance of ENP gray whales?

20 A. The 2018 SAR estimates the abundance of ENP gray
21 whales at 26,960.

22 Q. Does the SAR list the PBR, potential biological
23 removal?

24 A. It does. The PBR is 801 individuals for ENP
25 gray whales.

1 Q. Could you please explain the concept of PBR?

2 A. Sure. PBR is the potential biological removal
3 level, and that is the number of animals, not including
4 natural mortalities, that may be removed from a population
5 while still allowing that population to achieve or
6 maintain its OSP.

7 Q. Does the 2018 SAR list a number for HCM or human
8 caused mortalities?

9 A. Yes, it does. In the 2018 SAR for ENP gray
10 whales, we estimate the annual human caused mortality to
11 be 139 animals.

12 Q. And what kind of morality does HCM include?

13 A. So human caused mortality includes a number of
14 types of serious injury or mortality. That can range from
15 directed takes such as through a hunt or intentional
16 killings to incidental takes such as ship strikes or
17 entanglement with fishing gear or other known debris.

18 Q. Dr. Bettridge, does the 2018 SAR discuss HCM in
19 the context of the Chukotka hunts that are considered? Is
20 that considered part of the HCM?

21 A. Yes, it is. So part of the 139 accounts for
22 that hunt.

23 Q. And do you recall of that 139, how many of those
24 individuals are taken in Chukotka hunt?

25 A. Approximately 126 of the 139.

1 Q. Does the SAR also discuss the historical removal
2 of ENP gray whales by Chukotka Indians?

3 A. Yes, it does.

4 Q. What does it say?

5 A. The SAR states that hunts go back decades and
6 approximately were -- the take was about 100 per year
7 until about the last decade when that number rose to about
8 126 per year, and the range, I think it was from the mid
9 '80s to 2016, gave a number of over 3700 gray whales that
10 were hunted.

11 Q. So do you expect the Chukotka hunt to continue
12 to be included in the HCM for the ENP gray whale stock?

13 A. Yes, as long as the hunt continues and we have
14 information about the number of animals that are killed or
15 taken, we will include that.

16 Q. Have there been any quotas approved recently
17 that would indicate that this hunt would continue?

18 A. Yes. The IWC recently approved a 7-year quota
19 for the hunt of gray whales. That amount equates up to
20 140 animals per year for a total of 980.

21 Q. Will that quota be shared?

22 A. The quota is given to both the U.S. and Russia.
23 In the past, when we have not used our portion, we have
24 given it to Russia for takes.

25 Q. When you say the U.S., who is that quota

1 designated for?

2 A. This is for the Makah.

3 Q. So going back to human caused mortality in
4 relationship to PBR, would you remind us of the
5 relationship between those two numbers?

6 A. Certainly. PBR is an index for managers and we
7 then compare to PBR the estimate of annual human caused
8 mortality. So if human caused mortality exceeds PBR that
9 stock becomes strategic, designated as strategic if it is
10 not so already. So any human caused mortality level that
11 is below PBR, as in the case of the ENP gray whales, is
12 not a cause for concern for managers in terms of the
13 ability of that stock to maintain or reach its OSP.

14 Q. Thank you. Does the SAR state whether the
15 Eastern North Pacific stock is within optimum sustainable
16 population?

17 A. Yes, it does. It cites Punt and Wade 2012, who
18 did an OSP analysis for the stock and found the stock to
19 be within its OSP level.

20 Q. Thank you. And this term has been discussed
21 quite a bit already today, but could you again give us
22 preview of what OSP really means?

23 A. Sure. As Chris Yates described earlier, it is
24 the purpose and goal of the MMPA for stocks to maintain or
25 achieve its OSP range. OSP is the number of animals where

1 a population would reach its maximum net productivity
2 level. The bottom range of the OSP is the maximum net
3 productivity level ranging up to K or the carrying
4 capacity.

5 Q. And in terms of carrying capacity, does the SAR
6 discuss any estimates of the carrying capacity for the
7 Eastern North Pacific gray whale stock?

8 A. The 2018 SAR for the ENP gray whale again cites
9 Punt and Wade 2018, and they gave an estimate for K at
10 that time to be around 26,000 animals. They did note,
11 however, that it is normal for K to fluctuate within
12 environmental conditions. So K is not a hard stock or
13 static number. So as with fluctuations in K, you would
14 expect fluctuations in the abundance of a stock that is at
15 or near K.

16 Q. And does the ENP SAR say anything about the
17 current status of the Pacific Coast Feeding Group?

18 A. So the current SAR discusses the Pacific Coast
19 Feeding Group as a feeding aggregation within the range of
20 that stock. We provide PBR and an abundance estimate as
21 well as an estimate of human caused mortality for that
22 feeding group.

23 Q. If the PCFG is not a stock, why does the SAR
24 nevertheless present these various estimates that you just
25 described?

1 A. So as we're all probably very familiar, there's
2 a lot of interest in this particular feeding group and up
3 until we had our taskforce in 2012, there was a question
4 as to whether this feeding aggregation was, in fact, a
5 separate stock. So until then, we identified it as a
6 prospective stock within the SAR. Since then, the agency
7 has decided that we are not identifying it as a separate
8 stock, but because of the interest and the waiver request,
9 we recognize that this is a population that we want to
10 make sure continues its role in the ecosystem. So we
11 therefore provided information on the abundance, what
12 would be a PBR if it were a stock and the estimate of
13 human cause mortality ensues.

14 Q. Thank you. And finally, I'd like to turn to
15 your declaration on the 2019 ENP unusual mortality event.
16 Could you just explain to us what is an unusual mortality
17 event?

18 A. Sure. A marine mammal unusual mortality event
19 is a stranding event that is unusual magnitude and usual
20 number of animals involved and then demands immediate
21 response.

22 Q. And what is then the immediate response? What
23 happens after a UME has been declared?

24 A. So under the MMPA, once a UME is declared, we
25 initiate a federal investigation into the event. So we

1 | will convene an investigation team, and that's usually
2 | comprises members of our stranding response networks, our
3 | working group on marine mammal unusual mortality events
4 | and usual agency staff as well. We will then develop
5 | protocols for sample collections related to that event.
6 | So we usually will then want additional information above
7 | and beyond what is normally collected in a stranding if
8 | possible.

9 | And then it also opens up the availability of
10 | what's called our contingency fund. So network responders
11 | who are responding to animals involved in the event could
12 | potentially be reimbursed for their costs. So those costs
13 | are associated with sample collections and necropsies and
14 | time, or anything related to the response.

15 | Q. Dr. Bettridge, how will NMFS know when the UME
16 | has concluded?

17 | A. So each UME is unique. No two are the same. So
18 | we will continue to monitor and continue this
19 | investigation until the working group on marine mammal
20 | unusual mortality events believes that it has returned to
21 | a more normal situation. We'll then look at the results
22 | of the investigation and the summary report and once that
23 | working group reaches agreement, they will recommend to
24 | the NOAA Assistant Administrator that the UME be
25 | officially closed.

1 consistent with the Act as well as our guidelines for
2 assessing marine mammal stock.

3 Q. So it's fair to say your expertise is more on
4 the policy side and not on the scientific side?

5 A. Yes.

6 Q. So is it correct that the range of the PCFG gray
7 whales extends from California to the southeast Alaska?

8 A. Of which gray whales?

9 Q. PCFG.

10 A. PCFG. The PCFG ranges from 41 degrees north to
11 52 degrees north latitude.

12 Q. And about where are those degrees?

13 A. Would you like to bring up the exhibit? Wait,
14 I'll get it.

15 Q. So it's limited to about British Columbia?

16 A. Yes, it's the dotted line on the exhibit.

17 Q. Are you aware that the PCFG range used to be a
18 bit broader than that and extended to Alaska?

19 A. Okay.

20 Q. All right. So then you have no comment on why
21 NMFS defined the range to be like that?

22 MS. IMAKI: Objection, lack of foundation.

23 THE WITNESS: My understanding is that our
24 definition is consistent with the IWC's definition.

25 BY MS. LEWIS:

1 Q. Okay. Thank you. So the Pacific Coast Feeding
2 Group whales, do they generally spend more of their time
3 near shore than the other broader ENP stock?

4 A. That is my understanding.

5 Q. So are you familiar with the report of the gray
6 whale stock identification workshop, the 2013 report?

7 A. The Weller, et al.

8 Q. Yes.

9 A. Yes, I am.

10 Q. Okay. Thank you. So in that report, the
11 authors state that PCFG gray whales have a higher rate of
12 scarring than other gray whales. Would you agree with
13 that?

14 A. I don't recall offhand, but if that's what you
15 say is in the report then, yes. Dr. Weller can probably
16 address that.

17 Q. Okay. So in terms of the cryptic mortality, we
18 heard that only 3.92, 13% of gray whales that die each
19 year end up actually stranded and being reported. Is that
20 correct?

21 A. Yes.

22 Q. So does NMFS account for cryptic mortality in
23 the SAR reports?

24 A. So it depends on the stock, of course.

25 Q. Okay. Sorry.

1 A. Sorry. But my understanding is in the gray
2 whale SAR, we do not account for cryptic mortality. Go
3 ahead.

4 Q. I was just going to -- I'm sorry. I didn't mean
5 to interrupt. You said you do not or you do?

6 A. I do not believe that cryptic mortality is
7 extrapolated for the ENP gray whales.

8 Q. Do you know why that is?

9 A. I don't know actually. I think part of it has
10 to do with when the strandings come in, understanding
11 where they originated, but I just don't think we have the
12 robust data for that at this point.

13 Q. Thank you. So how frequently does NMFS update
14 its gray whale population and abundance estimates?

15 A. I believe we do that annually.

16 Q. So the PCFG in the SAR reports an informational
17 PBR of 3.5. Is that correct?

18 A. In the 2018 SAR, yes.

19 Q. Yes, I apologize. I should have clarified that.
20 So then this means that only 3.5 PCFG gray whales can be
21 taken as a result of human activities to also allowing
22 that group to maintain its current population level; is
23 that correct?

24 A. Well, I wouldn't that far. Again, as I stated,
25 that's an informational PBR. So if PCFG were to be a

1 stock, then yes.

2 Q. Okay. Are you familiar with the Guidelines of
3 Assessing Marine Mammal Stock or the GAMMS?

4 A. Yes, I am.

5 Q. Are you also familiar with the IWC's stock
6 designation criteria?

7 A. Not as familiar as I am with the GAMMS.

8 Q. I understand. Are those similar, different, the
9 same? How would you characterize those two sets of
10 criteria?

11 A. I actually can't speak with specificity to the
12 IWC criteria.

13 Q. That's fine. Thank you. So let's see here. So
14 is it true then that, with the GAMMS then, the primary
15 objective of identifying stocks is to achieve the policies
16 and purposes of the Marine Mammal Protection Act?

17 A. Could you repeat the first part of that question
18 please?

19 Q. Yes. So under the GAMMS, when you are working
20 on identifying stock structure, the goal is to identify
21 stock structures in such a way to achieve the policies and
22 purposes of the Marine Mammal Protection Act?

23 A. I would say to identify stocks that are
24 consistent with the definition of stock under the Marine
25 Mammal Protection Act.

1 Q. So when you identify stocks, do you not consider
2 at all whether those stock structures are consistent with
3 the goals in the Marine Mammal Protection Act? So, for
4 example, maintaining marine mammals as a functioning
5 element of the ecosystem of which they are a part.

6 A. We do, but first and foremost we want to make
7 sure that it is consistent with the definition of stock
8 under MMPA, and that definition is a group of mammals of
9 the same species or a small taxa that are in a common
10 spatial arrangement and interbreed when mature.

11 Q. So what kind of information is used to identify
12 different stocks of the species?

13 A. So a number of different lines of evidence may
14 be used for identifying stock. We look at demographic
15 information, abundance, distribution, migratory patterns.
16 There are a number of different lines of evidence that may
17 be used. Some are stronger than others depending on the
18 species.

19 Q. So the GAMMS, they don't require stocks to be
20 demographically isolated to support stock for designation.
21 Is that correct?

22 A. That's correct. With the 2016 revision of the
23 Guidelines, we clarified that stocks should be
24 demographically independent populations.

25 Q. Can you define what demographic independence

1 means?

2 A. Demographic independence means that the
3 demographics of a population are more a result of the
4 internal dynamics of the population than external.

5 Q. So as a statement in GAMMS, the population
6 dynamics are more of a consequence of birth and deaths
7 within a group rather than immigration or emigration. Is
8 that accurate?

9 A. Yes.

10 Q. So does NMFS define any proportion of internal
11 versus external recruitment that's necessary to support
12 stock designation?

13 A. Do you mean do we set an amount?

14 Q. Yes.

15 A. No.

16 Q. Is there a reason why not or is it just stock
17 specific?

18 A. I would think it would be stock and situation
19 specific.

20 Q. So is it correct that the GAMMS also
21 specifically note that the failure to detect genetic and
22 morphological differences does not mean that the
23 populations are not demographically independent?

24 A. That is contained in the 2016 GAMMS.

25 Q. So genetic differences are not necessarily

1 required to designate different stocks?

2 A. That's correct.

3 Q. Would you agree that the PCFG whales have some
4 statistically significant genetic differences from the
5 rest of the ENP population?

6 A. When it comes to mitochondrial DNA, yes. Yes.

7 Q. When was the last workshop assessing the stock
8 structure of gray whales?

9 MS. IMAKI: Objection. Outside the scope the
10 facts that are at issue in the hearing, the PCFG stock
11 structure.

12 MS. LEWIS: I was asking about when the last
13 workshop assessing the stock structure of gray whales was.

14 THE COURT: And your objection.

15 MS. IMAKI: I'm sorry. I misheard the question.

16 THE COURT: I'm sorry. I did not hear your
17 objection.

18 MS. LEWIS: The microphones are --

19 THE WITNESS: So go with every fifth word that
20 someone says. So in the United States, we had a taskforce
21 that was convened to look at stock structure of ENP gray
22 whales in 2012. However, there have been other workshops
23 looking at gray whale stock structure conducted by the
24 IWC.

25 BY MS. LEWIS:

1 Q. And can you tell me why that initial 2012
2 workshop was convened?

3 A. Because there was a significant question about
4 the status of the ENP gray whales relative to this
5 particular feeding group.

6 Q. So given the information and studies that have
7 been published since 2012 regarding this issue, is NMFS
8 planning to hold another workshop to reassess and update
9 its guidelines regarding gray whale stock structure?

10 A. I do not know of any plans for such a workshop
11 at this point.

12 Q. So as we already discussed, the ENP stock is
13 currently undergoing UME. Is that correct?

14 A. Yes, that is correct.

15 Q. Can you describe NMFS' protocols of collecting
16 samples from the stranded gray whales? Are you familiar
17 with those protocols?

18 A. I am somewhat, yes. So our protocols under a
19 UME, as I stated earlier, differ from our normal stranding
20 protocols. So in this case, we strive to collect
21 additional information. And that protocol differs by UME.
22 So, for example, if we suspect a pathological reason for
23 the UME, we will request that different samples be
24 collected than if we suspect that it's maybe human caused
25 mortalities. So it depends on the UME.

1 Q. Can you describe what the protocols are for this
2 UME?

3 A. Not offhand but we do have the strict protocols
4 for that. But I will point out that while we put our
5 protocols, it's somewhat of a wish list and we understand
6 that we're not going to be able to get every sample from
7 every whale. It really depends on the state of
8 decomposition of the individual animal as well as our
9 ability to access the animal. In some cases, we just
10 can't get there to get the samples.

11 Q. Do you know where NMFS sends these samples from
12 this UME for analysis?

13 A. So I just want to clarify that NMFS doesn't
14 necessarily send the samples. It is our stranding
15 responders which are part of our network who collect the
16 samples and depending on where they are and with what lab
17 they work that will dictate where they send the samples.

18 Q. So I would assume those labs all have different
19 delivery times and results as well. Is that correct?

20 A. I would think so. Some might be more efficient
21 than others.

22 Q. And then once the labs get those results, do
23 they expeditiously report the results to NMFS?

24 A. The labs will report their results to the
25 stranding responders who collected and submitted the

1 samples for analysis.

2 Q. So does the same situation apply with regard to
3 any photographs that are taken? We heard that there were
4 some photographs taken of stranded whales that were
5 submitted to you guys in your research or analysis. Are
6 those also submitted by the stranding teams or are those
7 sent to NMFS?

8 A. I believe that they go straight from the
9 stranding responders to Cascadia. NMFS will -- we
10 automatically request level A data which is the very basic
11 information and that's held in our database. And through
12 our stranding response agreement with our stranding
13 responders, they must deliver those data into the database
14 within 30 days. However, for the level B and C data which
15 are more detailed, we do not have a database for those
16 data. So we may request that information from an
17 individual stranding response network partner but it's not
18 standard protocol for those to be delivered to us.

19 Q. What about any photographs about any stranded
20 whales being matched to individuals in one of the WNP
21 photo databases? Have any photographs to your knowledge
22 been submitted to those databases for possible
23 identification?

24 A. To my knowledge, we have not compared any photos
25 of the strandings to the western catalogs.

1 Q. Are they planning to do so?

2 A. I believe so.

3 Q. And just for the record, how many databases for
4 WNP whales are there?

5 A. My understanding there is two, but I would have
6 to defer to Dr. Weller on that.

7 MS. LEWIS: All right. Thank you.

8 THE COURT: All right. For Sea Shepherd?

9 MR. SOMMERMEYER: Yes. For the record, I'm
10 Brett Sommermeyer for Sea Shepherd.

11 **CROSS-EXAMINATION**

12 BY MR. SOMMERMEYER:

13 Q. Good afternoon, Dr. Bettridge.

14 A. Good afternoon.

15 Q. So NMFS has looked at the last UME, 1999-2000,
16 in assessing the current UME. Is that correct?

17 A. In terms of assessing the current UME. Can you
18 rephrase the question?

19 Q. Yes. I'll try to repeat it. So NMFS has looked
20 at the last UME in assessing the current UME, what's
21 causing the UME, what's behind the current UME.

22 A. Well, unfortunately with the 1999-2000 UME, we
23 do not have a cause for that UME. But we are looking at
24 the events of it in relation to what we're seeing happen
25 now, but we don't have a cause to compare it to what's

1 | happening now.

2 | Q. But NMFS' testimony in this hearing has pointed
3 | to the increase in PCFG population during the last UME as
4 | a significant fact. Is that correct?

5 | A. As a fact?

6 | Q. As an important fact?

7 | A. As an important fact. I say we would say it is
8 | a fact. I can't speak to the importance of it.

9 | Q. Is NMFS of the opinion that the last UME
10 | supports the potential conclusion that PCFGs are not going
11 | to be affected by the current UME?

12 | A. I believe what was stated earlier was that
13 | during the previous UME, PCFG's number nevertheless
14 | continue to increase in abundance, increase in abundance.
15 | I don't know if we made any statements saying that that's
16 | necessarily what's going to happen in this case.

17 | Q. And, in fact, you just testified on direct
18 | examine that no two UMEs are the same?

19 | A. Yes, that's true. They vary in terms of the
20 | duration, in terms of the cause and in terms of the
21 | species that are affected.

22 | Q. Is it using the best available science to
23 | conclude on the basis of a single sample size, in this
24 | case the first UME in 1999-2000, that same thing might
25 | occur in this UME?

1 A. Well, I'd like to point out that the UME
2 process, if that's what we want to call it, was not
3 introduced as a concept until the 1992 amendments. So the
4 only UME that we have to point to for gray whales since
5 1992 is 1999. There may have been other events that would
6 have qualified for a UME prior to '92, but we have not
7 labeled them as such.

8 Q. But the only UME for which you have a dataset to
9 assess is the one from 1999-2000. Is that correct?

10 A. The only event that we are calling a UME by
11 which to assess is that one, yes.

12 Q. In the last UME in 1999-2000, isn't it true that
13 there was no evidence based on your current data that
14 PCFGs were involved or impacted negatively?

15 A. Negatively, I would say based on the fact that
16 PCFGs continued to grow despite the UME, would say that
17 there was not a negative long-term effect in that UME.

18 Q. And clarifying, it continued to grow after the
19 UME during that time period?

20 A. Yes.

21 Q. We heard testimony earlier today from Dr. Yates
22 that at least one PSG --

23 A. PCFG.

24 Q. -- excuse me, PCFG, has been involved in the
25 current UME, correct?

1 A. Yes, so I heard.

2 Q. Does this fact suggest that different from the
3 first UME, the PCFGs now may be involved, negatively
4 impacted by this UME?

5 A. No, that's not how I interpret that.

6 Q. How would you interpret it?

7 A. Well, I'm saying with the 1999-2000, we were not
8 specifically looking at the group that we are now calling
9 PCFG whales. So I don't know how many that were involved
10 in the 1999-2000 UME would have been labeled as PCFG now.
11 So if we were going to do a comparison, it would be
12 difficult to do so.

13 Q. So turning to cryptic mortality, cryptic
14 mortality, we have 1 PCFG right now that's been found,
15 which may represent only 3.9% of the PCFG's loss, that
16 translates to potentially 26 dead PCFGs.

17 A. Okay.

18 Q. Is that correct?

19 A. I don't have my calculator but I'm going to
20 trust you.

21 Q. Okay. And if another PCFG gray whale is found
22 dead, and applying that same 3.9% factor, now you're
23 possibly facing 51 PCFGs that may be dead. Is that
24 correct?

25 A. Yes.

1 Q. Doing the math.

2 A. Yes.

3 Q. In fact, isn't it possible that we've already
4 arrived at the 192 PCFG abundance trigger that's set forth
5 in the regulations?

6 A. I would think that it is possible. We will know
7 because as we started earlier, we're doing annual
8 abundance estimates of the PCFG. So that's really what we
9 would rely on for knowing where the population is relative
10 to that 192 threshold, rather than extrapolations which
11 could vary from 3.9 to 13%.

12 Q. Thank you.

13 A. You're welcome.

14 THE COURT: Do you have -- yes.

15 MS. OWENS: Okay. I probably should wait for
16 Dr. Weller, but a few things are on my mind.

17 THE COURT: Okay.

18 MS. OWENS: I'll be brief. I promise. Thank
19 you.

20 **CROSS-EXAMINATION**

21 BY MS. OWENS:

22 Q. Hello.

23 A. Good afternoon.

24 Q. Okay. The couple of things that come to mind,
25 well, was that recently found PCFG whale in California,

1 | was it emaciated?

2 | A. I do not know. We just learned about this on
3 | Monday.

4 | Q. So we don't know why it died at all?

5 | A. At this point, we do not know the cause of
6 | death.

7 | Q. Okay. A comment I'd like to make is that, you
8 | know, there's been a couple sort of ironic smiling
9 | references to the fact that the PCFG abundance increased
10 | during the last UME in 1999-2000. Well, do you have an
11 | explanation for that? I do. But do you?

12 | A. Just so -- my understanding is that PCFG is
13 | increasing annually. We're bringing in about four or more
14 | recruits into the PCFG, and we can bring up the graph if
15 | we need to.

16 | Q. No, no. I think births, you know, contribute to
17 | that four a year for one thing, but one thing I'm getting
18 | at is during that horrible time in 1999-2000, when the
19 | beaches were strewn from Mexico all the way north with
20 | dead gray whales like there were last spring, there was a
21 | big feeding group seen in '99 during the Makah hunt
22 | actually, and it seems that those were some starving
23 | whales. We didn't realize it right then. It kind of
24 | unfolded that year. Those were some starving whales that
25 | pulled over and fed in those PCFG areas. So I don't -- I

1 think it's misleading to say that the PCFG abundance
2 increased during the year. I mean I think it was more
3 like starving whales coming north, pregnant, maybe nursing
4 mothers, random starving whales, came and found food in
5 the PCFG feeding areas and that that would explain kind of
6 a bulge in sightings then. And you even just said that
7 those not might be whales that we would now label as PCFG
8 which kind of confirms my feeling, you know, about why
9 there was a bulge right then when the whales were starving
10 to death.

11 MS. IMAKI: Your Honor, I would like, with
12 respect, to object to lack of foundation.

13 MS. OWENS: Okay.

14 THE COURT: I understand the objection. I would
15 ask you to move on.

16 MS. OWENS: Okay. I'm sorry. I don't know what
17 I'm doing.

18 BY MS. OWENS:

19 Q. Okay. The other thing --

20 A. Can I just make one clarification?

21 THE COURT: Let the witness answer.

22 THE WITNESS: So earlier when I said that the
23 increase of about four per year, that that has to do with
24 immigration into the population, not just the result of
25 births. And the other point that I wanted to make was

1 | that the PCFG by definition are animals that are seen in
2 | that range during June through November, two or more
3 | times. So not just one year when they might have come
4 | into that area.

5 | Q. So that's why you say you don't know if that
6 | bulge were actually PCFG whales?

7 | A. I don't think that's what I said earlier when I
8 | was responding to the other attorney's questions about the
9 | UME. I was stating --

10 | Q. You said they may not be labeled as PCFG now.

11 | A. What I was saying was that because PCFG was not
12 | an identified feeding aggregation at that time, we did not
13 | label them as PCFG. So they were labeled as a little more
14 | generic ENP.

15 | Q. Well, we were calling them resident -- I mean we
16 | had names for them. I'll let that one go now. My other
17 | thought was that if the starvation of the gray whales as
18 | we saw last spring, I mean it could repeat again this
19 | spring. Last time it was a 2-year effect, the second year
20 | being worse mortalities than the first year. We don't
21 | know what spring will bring. It's really horrifying to
22 | think, you know, that it could be another terrible year.

23 | If they are starving, you know, thin blubber,
24 | emaciation and just can't make the migration again like
25 | last year that would seem to imply a food problem in the

1 north. And I think that's kind of generally considered to
2 be a possibility.

3 So what I'm getting at is a food problem in the
4 north could be if that's it, could be directly tied to
5 climate change because the warming of the waters and the
6 loss of the sea ice has. We don't know the impact on the
7 food chain that relies on the algae growing under the ice
8 to fall down to the bottom and the benthic guys that the
9 gray whale eat. So what I'm thinking is, in that case, if
10 you ever just plain old say, yes, it's climate change,
11 wouldn't that be human caused mortality?

12 A. Well, at this point, we do not have an
13 indication for the cause of this UME. So we'll have to
14 see where that comes out. In general, when we are looking
15 at and accounting for human caused mortality and serious
16 injury, we account for the direct human caused mortality.

17 Q. Okay. Have there been any reports from the
18 Chukotka hunt area? Has NMFS reached out to ask about
19 body condition of the whales being harvested this last
20 summer up there? Is there any information from the north?

21 A. I'm not qualified to answer that question I'm
22 afraid.

23 Q. Okay. I'll let that go. Thanks a lot.

24 A. Thank you.

25 THE COURT: Any redirect? Sorry. Mammal

1 Commission.

2 MR. SCHUBERT: One more from AWI, Your Honor.

3 THE COURT: One more. Sure.

4 MR. SCHUBERT: Good afternoon, Your Honor.

5 **CROSS-EXAMINATION**

6 BY MR. SCHUBERT:

7 Q. Good afternoon, Dr. Bettridge.

8 A. Good afternoon.

9 Q. I'm sorry. I have to get used to this.

10 A. Yeah, it take a little getting used to.

11 Q. Yeah. Okay. Good afternoon. For the record,
12 my name is Donald Schubert, S-c-h-u-b-e-r-t, although I do
13 prefer my initials, DJ. Dr. Bettridge, thank you for your
14 time today. You've already answered some questions from
15 my colleague. I have three questions for you. Exhibit 2-
16 19 of your third declaration, is the unusual mortality
17 event initiation protocol.

18 A. Okay.

19 Q. In that protocol or that protocol appears to
20 contain the information compiled by the National Marine
21 Fisheries Service and submitted to its working group on
22 marine mammal unusual mortality events, it basically asks
23 if the spike in death of gray whales during the northbound
24 migration in 2019 constituted an unusual mortality event.
25 Is that correct?

1 A. Yes, that is part of our process. Before we
2 declare a UME, we consult with our working group and we
3 ask them to consider the various criteria and they will
4 make a recommendation to us.

5 Q. Thank you. As I read that document, the
6 majority of the information contained in it, with the
7 exception of content referring to the previous UME 1999-
8 2000, and some information about historical gray whale
9 population data, the rest of the information is current.
10 Is that correct?

11 A. That's my understanding.

12 Q. Okay. Thank you. So on page 9 of that
13 protocol, there's a question about whether this event
14 involves subsistence food species. Do you remember that
15 question?

16 A. Not offhand, I'm sorry.

17 Q. So the answer that was provided in that question
18 is, and I'm quoting here, "Yes, there is a small
19 subsistence harvest in Alaska," and then in parentheses it
20 says, "(and outside of the U.S. and Russia)." To the best
21 of your knowledge, are the native whalers in Alaska
22 currently permitted by the U.S. Government to kill gray
23 whales?

24 A. No, I do not believe so.

25 Q. Okay. Thank you very much.

1 MR. GOSLINER: I'll wait until you get a drink.

2 **CROSS-EXAMINATION**

3 BY MR. GOSLINER:

4 Q. Okay. I think some of this area has already
5 been covered, but I want a few clarifications. In terms
6 of attributing UME mortality into a SAR, you would
7 obviously reflect any population decline, but in terms of
8 assessing human caused mortality, you would require
9 affirmative determination that it was an entanglement or a
10 ship strike or something.

11 A. Yes, that's correct. In previous cases with
12 other stocks, when there has been a UME, we will often
13 mention the UME if it's occurring in the time period that
14 that SAR is covering and again it's usually a bit of a
15 time lag between the year of the SAR and when it comes
16 out. So, for example, the 5-year timeframe for a SAR may
17 -- it usually lags before it actually is reflected there.
18 So a UME could be occurring, but it would not be accounted
19 for in the SAR for a couple of years. And when we do
20 account for human caused mortality, as you said, we do
21 need to affirm that it is in fact human caused. So in a
22 case, for example, of bottlenose dolphins, that were
23 affected by the Deepwater Horizon oil spill, there was a
24 UME, but until we were able to directly attribute those
25 deaths to the oil spill, we did not count them as human

1 | caused mortalities.

2 | Q. And is there any difference between UME year and
3 | a non-UME year as to how you might attribute let's say a
4 | carcass that you can't really determine cause of it?
5 | Would you be more likely to call it an entanglement in a
6 | non-UME year because there was no other explanation or
7 | would you --

8 | A. We would want confirmation of human cause before
9 | we could count it towards it.

10 | Q. So you wouldn't count a carcass in a fishing
11 | area absent like net scars or something on them?

12 | A. Correct.

13 | Q. Okay. And you also said that you counted -- I
14 | think your term was direct human caused mortality but not
15 | indirect? Is there -- can you point to anything in the
16 | MMPA that says you're only supposed to count direct?

17 | A. Well, what I was saying is that until now my
18 | understanding is that we have not counted climate change
19 | as -- or deaths related indirectly to climate change as
20 | human caused mortality.

21 | Q. Okay. And then talking about the human caused
22 | mortality, I think you said that 126 of the 139 that's in
23 | the current SAR are from Russian subsistence whaling. And
24 | I also think you said those were landed whales. Is that
25 | correct?

1 A. I am not sure. I would need to look to confirm
2 that.

3 Q. Okay. I'm not quite sure how to get an answer
4 to that in the record. Is there someone else I should
5 ask? I don't know if that for instance includes struck
6 and lost whales or something and how you might factor that
7 into your SAR analysis.

8 A. So I would have to say -- can I push this to Dr.
9 Weller. He might be more familiar.

10 Q. Okay.

11 A. It will give us an opportunity to get that back
12 on record once we check.

13 Q. And then kind of a related question. As you
14 know, the Chukotkans take the full complement of whales
15 that they're allowed to take or is that also a question
16 for Dr. Weller?

17 A. I believe they don't take as many as they are
18 allow to take.

19 Q. I think that's all the questions I have. Thank
20 you.

21 A. Thank you.

22 THE COURT: Any further cross?

23 (No response.)

24 THE COURT: All right. Redirect?

25 MS. IMAKI: Yes. Thank you.

REDIRECT EXAMINATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BY MS. IMAKI:

Q. Dr. Bettridge, earlier in your -- is this working? Earlier in your testimony, you said that cryptic mortality was not included in SARs. Could you explain how any mortality that would occur might be included in SARs through abundance surveys?

A. Can you rephrase that?

Q. Sure. You had mentioned that cryptic mortality technically was not included in the SAR.

A. In the gray whale SAR.

Q. In the gray whale SAR. Does the SAR, however, evaluate the population abundance and would that number capture any mortality of whales that would occur through the UME?

A. Yes, it does.

Q. You also discussed the concept of PBR. Do you recall whether PBR is averaged over a number of years or is it a single annual number?

A. So PBR is an annual number. However, the information that feeds into it is -- I'm not --

Q. Okay.

A. Okay. So when we compare PBR to human caused mortality, the human caused mortality is an annual estimate but it's based on usually the previously 5 years'

1 | worth of serious injury and mortality data, sometimes
2 | longer timeframes than that.

3 | Q. So would exceedance also be evaluated in terms
4 | of an average over a number of years?

5 | A. So the exceedance would be -- we would look at
6 | the previous 5 years usually in this case for an estimate
7 | of what the human caused mortality is. So it would be
8 | averaged in.

9 | Q. I wanted to ask you a few clarifying questions
10 | about your testimony related to the PCFG and the previous
11 | UME.

12 | A. Sure.

13 | Q. And if I could ask for the NMFS demonstrative
14 | that shows the population abundance trends. Dr.
15 | Bettridge, you testified that in the 1999-2000 timeframe
16 | we were not yet tracking PCFG, and could you clarify when
17 | you say they weren't labeled as PCFG, were you referring
18 | to the whales that were landed and were evaluated through
19 | UME?

20 | A. Yes.

21 | Q. And so during that time, none of the landed or
22 | the stranded I should say --

23 | A. Stranded, yes.

24 | Q. -- stranded whales, were evaluated to consider
25 | whether they were part of the PCFG. Is that correct?

1 A. That's my understanding.

2 Q. But if you look at this graph, any of the whales
3 that were labeled in the PCFG's graph, were by definition
4 seen at least 2 years?

5 MR. SOMMERMEYER: Objection. This is leading
6 the witness on direct exam.

7 THE WITNESS: So if a whale isn't labeled --

8 THE COURT: I'll allow it if she understands the
9 question.

10 THE WITNESS: So if a whale is labeled as PCFG,
11 it, by definition, has been seen two or more times in that
12 area.

13 BY MS. IMAKI:

14 Q. Is that true of the whales on this chart as
15 well?

16 A. Yes.

17 Q. Thank you.

18 A. On the red line.

19 Q. Thank you for clarifying that.

20 MS. IMAKI: No further questions at this time.

21 THE COURT: Any further questions of this
22 witness?

23 All right. Thank you for your time.

24 **(Witness excused.)**

25 MR. McNULTY: Your Honor, if I may, I'm NOAA

1 Fisheries, Chris McNulty.

2 THE COURT: Okay.

3 MR. McNULTY: May I make a request?

4 THE COURT: Certainly.

5 MR. McNULTY: So, first, I would like to
6 apologize to the public, to the parties and to His Honor,
7 for the difficulties we've had with the audio. I have
8 spoken with our audio-visual contractor, and they are
9 able, they think they will be able to improve the audio
10 quality but they are going to need some time to do that.
11 And given how rapidly we've moved through witnesses, if it
12 would be amenable to the Court, we would propose that we
13 recess for the day to allow them time to fix the audio, so
14 hopefully it's working well for everybody tomorrow. But
15 again that's --

16 THE COURT: I think would be appropriate because
17 right now we're going to be calling up your next witness.
18 So we would clearly be running into the end of the day,
19 and then having to bring them back in the morning anyway.
20 And actually we have another witness we're going to be
21 taking out of turn tomorrow morning. So I think that's
22 appropriate right now. I'd rather try to get the issue
23 done so they can get done by the time they have to vacate
24 the building tonight.

25 So at that stage, we're in recess for today. We

1 | will meet tomorrow at 9 a.m.

2 | **(Whereupon, at 4:21 p.m., the hearing was**
3 | **recessed, to reconvene on Friday, November 15, 2019, at**
4 | **9:00 a.m.)**

5 |

6 |

7 |

8 |

9 |

10 |

11 |

CERTIFICATION

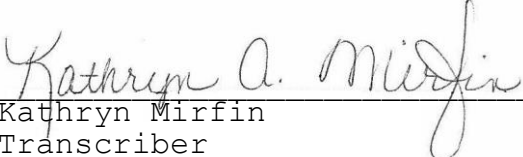
This certificate is valid only for a transcript accompanied by my original signature required on this page.

I hereby certify that the proceedings in the matter of Proposed Waiver and Regulations Governing the Taking of Eastern North Pacific Gray Whales by the Makah Tribe, Docket No. 19-NMFS-0001, heard on Thursday, November 14, 2019, before the Honorable George J. Jordan, Administrative Law Judge, were recorded by means of audiotape.

I further certify that, to the best of my knowledge and belief, page numbers one to one hundred twenty-seven constitute a complete and accurate transcript of the proceedings as transcribed by me.

I further certify that I am neither a relative to nor an employee of any attorney or party herein, and that I have no interest in the outcome of this case.

In witness whereof, I have affixed my signature this 16th day of December, 2019.


Kathryn Mirfin
Transcriber

CERTIFICATION

This certificate is valid only for a transcript accompanied by my original signature required on this page.

I hereby certify that the proceedings in the matter of National Oceanographic and Atmospheric Administration, Docket number 19-NMFS-0001, hearing heard on Wednesday, November 14, 2019, before the Honorable George J. Jordan, were recorded by means of audiotape.

I further certify that, to the best of my knowledge and belief, page numbers one to one hundred twenty-six five constitute a complete and accurate transcript of the proceedings as proofed/corrected by me.

I further certify that I am neither a relative to nor an employee of any attorney or party herein, and that I have no interest in the outcome of this case.

In witness whereof, I have affixed my signature this 21th day of January, 2020.

Sally S. Gessner

Sally S. Gessner, CER
Certified Electronic Court Reporter