

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

In re:

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

) Administrative Law Judge
) Hon. George J. Jordan
) Docket No. 19-NMFS-0001
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DECLARATION OF DR. MICHAEL F. TILLMAN

I, Dr. Michael Tillman, declare as follows:

1. I am a marine mammal scientist serving as one of the three members of the Marine Mammal Commission (MMC). I was nominated by President Obama and my appointment as a Commissioner confirmed by the Senate in June 2010. As a Commissioner, I am familiar with the requirements of the Marine Mammal Protection Act and related statutes, including the Endangered Species Act, Whaling Convention Act, National Environmental Policy Act, particularly as they apply to Aboriginal Subsistence Whaling (ASW) generally and the Makah hunt for gray whales specifically.

2. As detailed below, I have over 45 years' experience attending International Whaling Commission (IWC) meetings, first as an employee of the National Marine Fisheries Service (NMFS), then as a contractor providing expert advice to U.S. delegations to the IWC, particularly with respect to ASW issues, and most recently as the MMC's representative on U.S. delegations. Given my long history of involvement with ASW issues before the IWC, and with U.S. efforts to secure an

ASW catch authorization for gray whales on behalf of the Makah Tribe, I am well qualified to testify on these issues.

3. Section 103(b) of the MMPA sets forth various factors that NMFS must consider in deciding whether to prescribe regulations to authorize the taking of marine mammals. Among those factors is the effect of such regulations on “existing international treaty and agreement obligations of the United States.” The primary question in this regard is whether the issuance of a waiver to allow the taking of gray whales by the Makah Tribe is consistent with the International Convention for the Regulation of Whaling (ICRW) and the actions taken to implement that treaty by the IWC. In the declaration filed in this rulemaking by D.J. Schubert on 20 May 2019¹, he asserts that the Makah Tribe does not qualify for an ASW quota from the IWC. As discussed below, I disagree with his assertion.

4. After obtaining a Ph.D. in Fisheries Science from the University of Washington in 1972, I started my professional career at NMFS’s Northwest and Alaska Fisheries Science Center as a Fisheries Biologist, undertaking assessments of the status and trends of North Pacific fish stocks subject to commercial harvest. In 1974, I transferred to the Center’s newly formed Marine Mammal Division, where I applied my professional training and experience to stock assessments of marine mammals, including North Pacific/Arctic stocks of bowheads, gray whales, humpback whales, and Dall’s porpoises. Also in 1974, I attended my first meeting of the IWC’s Scientific Committee (SC) and subsequently focused my personal research on those whale stocks subject to commercial harvest in the North Pacific.

¹ See paragraphs 49-53 of Mr. Schubert’s declaration.

In that year, at a special meeting of the SC, I also contributed to the development of a New Management Procedure under consideration, and subsequently adopted, by the IWC for the management of commercial whaling. In 1978, as Deputy Director of the Marine Mammal Division, I oversaw the planning and implementation of a major new research program on bowheads that responded to the IWC's concern about the status of the bowhead stock hunted by Alaska Eskimos. In 1983, I was elected Chair of the SC for a 3-year term, covering the difficult era during which commercial catch limits were phased out as a consequence of the moratorium on commercial whaling. During my days on the SC and afterwards I authored or co-authored over 30 peer-reviewed publications on whale stock assessments or the management of whaling, including ASW.

5. With respect specifically to ASW, the IWC first gave seriously consideration to this type of whaling at its 1977 annual meeting when the first tentative assessment efforts for the Bering-Chukchi-Beaufort Seas (BCB) stock of bowheads suggested a best estimate of current abundance of 1,300 animals versus an estimated original stock size of 11,700–18,000, implying that the population had declined to 7–11% of its original abundance (Tillman, 1980). Given this apparent degree of endangerment in the face of an expanding hunt by U.S. Eskimos, the SC concluded that any taking could adversely affect the stock and contribute to preventing its eventual recovery, and recommended that, on biological grounds, this hunt should cease (IWC, 1978a). The IWC agreed and deleted the words “or right” from the aboriginal exemption for right (which included bowheads at that time) and gray whales (IWC Schedule paragraph 2), thus removing the legal basis for the Alaska Eskimo hunt (IWC, 1978b). The IWC's decision fomented a domestic crisis within the United States, under whose auspices the Alaska Eskimo hunt was undertaken

(Tillman, 1980). Fortunately, special meetings of the SC and IWC on North Pacific sperm whales were scheduled for late 1977, which I suggested to senior members of the U.S. delegation would provide an opportunity for the U.S. to reopen the bowhead issue. The United States did so and pursued a strategy of proposing the restoration of a limited hunt, with limits on numbers struck, as well as those landed, to satisfy the Eskimo's subsistence and cultural needs; the United States also committed to undertaking a major new domestic research and management program intended to provide the information necessary for science-based management of the bowhead hunt (Tillman, 1980). I presented the U.S. proposal to the SC for its review. While the SC reiterated its earlier finding that, on biological grounds, the hunt should not be allowed, it agreed to add to its report my proposed language that "*it also recognized that the IWC might wish to consider subsistence or cultural needs that were beyond the SC's expertise*" (IWC, 1979a). Taking account of the SC's advice and the representations of the United States, the IWC ultimately revised its earlier decision, restoring the hunt for the 1978 season by approving a small take of 12 whales landed or 18 struck, whichever occurred first, provided that no calves nor any bowhead whale accompanied by a calf were struck, taken, or killed, and amending the IWC's Schedule accordingly (IWC, 1979b).

6. In 1979, I served on the IWC's Panel Meeting of Experts on Aboriginal/Subsistence Whaling and, in 1981, on the IWC's Ad Hoc Technical Committee Working Group on Development of Management Principles and Guideline for Subsistence Catches of Whales by Indigenous (Aboriginal) People, both of which began the process of developing a formal basis for managing ASW (Tillman, 2000). In 1979, the IWC also began requiring the United States to

document the nutritional, cultural, and subsistence needs of the Alaska Eskimos for bowhead whales, and in 1980 extended that requirement to all member governments having aboriginal hunts under their jurisdiction. The IWC accepted the working group's definitions for ASW in 1982 (with the exception of "subsistence use" which remained as a working definition until its formal adoption in 2004), as well as its proposed objectives for the management of whale stocks subject to aboriginal subsistence whaling. In 1982, the IWC also accepted the working group's definitions and principles for management; adopted into the Schedule a management scheme for ASW based upon them; and established the ASW Subcommittee to consider the documentation of needs submitted in relation to ASW and the uses of whales taken for such purposes, and to provide advice to the IWC for its consideration and determination of appropriate management measures. Taken together with the advice of the SC, all of the elements required for a formal management process for ASW were accordingly put into place.

7. The ICRW is very explicit about the measures that might be applied to the management of whaling, including ASW:

"Article V

1. The Commission may amend from time to time the provisions of the Schedule by adopting regulations with respect to the conservation and utilization of whale resources, fixing (a) protected and unprotected species; (b) open and closed seasons; (c) open and closed waters, including the designation of sanctuary areas; (d) size limits for each species; (e) time, methods, and intensity of whaling (including the maximum catch of whales to be taken in any one season); (f) types and specifications of gear and apparatus and appliances which may be used; (g) methods of measurement; and (h) catch returns and other statistical and biological records."

The Schedule lists the measures the IWC has adopted, and accepting or rejecting a proposed amendment to the Schedule for a catch limit proposed under paragraph 1.(e) above is the means by which the IWC accepts or rejects a proposed ASW

hunt. According to paragraph E of the IWC's Rules of Procedure, if the IWC cannot reach a decision by consensus on such a proposal, then amending the Schedule requires obtaining at least a three-fourths majority vote:

“E. ...The Commission shall make every effort to reach its decisions by consensus.

3. (a) Where a vote is taken on any matter before the Commission, a simple majority of those casting an affirmative or negative vote shall be decisive, except that a three-fourths majority of those casting an affirmative or negative vote shall be required for action in pursuance of Article V of the Convention.”

Another means of expressing a view on ASW is by adopting a resolution pursuant to Article VI of the ICRW, which requires a simple majority, as indicated in paragraph 3.(a). Article VI provides:

“Article VI

The Commission may from time to time make recommendations to any or all Contracting Governments on any matters which relate to whales or whaling and to the objectives and purposes of this Convention.”

For example, the requirement that the United States and other member governments having ASW hunts, submit a detailed needs statement was established by resolution. However, approving a resolution does not affect the adoption of an amendment to the Schedule. Finally, the setting of an ASW catch limit must be in accord with Article V.2.(c) of the ICRW:

“2.(c) shall not involve restrictions on the number or nationality of factory ships or land stations, nor allocate specific quotas to any factory ship or land station or to any group of factory ships or land stations;”

Within my experience with respect to ASW, this measure has been interpreted to mean that a catch limit is set by stock and not by hunt. Accordingly, if two or more member governments have hunts upon the same stock, then those countries must

make arrangements to share the available catch limit set by the IWC and ensure that the limit is not exceeded; these arrangements are made informally outside of IWC meetings. For example, while the IWC set the first formal catch limit for Eastern North Pacific (ENP) gray whales of 178 for ASW purposes in 1978, ostensibly to cover the Russian hunt (Tillman, 2000), the United States sought a share of that limit to cover the occasional taking by Alaska Eskimos from the same stock. Between 1970-1977 Alaska Eskimos took a total of 21 gray whales, with a range of 1-7 per year and annual average of 2.6 (Wolman and Rice, 1978). The United States negotiated on the sidelines of the meeting to obtain an annual catch of 10 gray whales, with arrangements to return unused catches to the Russian hunt. Between 1978-1990, U.S. catches declined (total of 14, with a range of 0-4 per year, and annual average of 1.1; U.S. Research Reports to IWC SC, 1980-1992), so at the 1988 meeting, the United States indicated that Alaska Natives would not take gray whales in the coming season (IWC, 1989); and at the 1991 meeting, that they would not take gray whales in future years (IWC, 1992).

8. In 1988, I was appointed to the federal government's Senior Executive Service, serving as NMFS's Senior Scientist for Fisheries with responsibilities that included, among others, serving on U.S. delegations to IWC meetings as a senior advisor. In 1993, I received the Presidential Rank Award of Meritorious Executive for sustained excellence in supporting U.S. goals of protecting whales internationally and recovering protected species nationally. In 1994, I received the Animal Welfare Institute's Albert Schweitzer Medal for whale conservation efforts. Also in 1994, I received the Presidential appointment as Deputy U.S. Commissioner to IWC, a position in which I served for ten years. As a consequence of my background, experience, and appointments, I became engaged at a high level in the formulation and implementation of U.S. policy with respect to

whales and whaling, particularly with respect to ASW, and often led the U.S. delegation to IWC meetings in the absence of the U.S. Commissioner. My tenure as Deputy Commissioner coincided with the period during which the United States pursued the establishment of a catch limit of ENP gray whales for the Makah Tribe under the ASW provisions of the Schedule.

9. In 1994, the U.S. government determined that the ENP stock of gray whales had recovered and removed it from the U.S. List of Endangered and Threatened Wildlife. Soon thereafter, the Makah Tribe (the Tribe) initiated discussions with the U.S. government about resuming its former hunt for gray whales, as guaranteed under the Treaty of Neah Bay (the Treaty). Article 4 of the Treaty states “*The right of taking fish and of whaling at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the United States...*” Following discussions with the Tribe about the means for obtaining a catch limit from the IWC, the government agreed to explore the possibilities under the IWC’s provisions for ASW. This exploration proceeded during 1995, with the Tribe being informed of the requirements for pursuing a catch limit for ENP gray whales at IWC, including: a needs statement for submission to the IWC that specified the catch level that would meet the Tribe’s needs for a ceremonial and subsistence take and addressed, among other things, the issues of a 70-year hiatus in whaling and the weaponry to be used; a management plan describing, inter alia, how the Tribe would implement and enforce measures adopted by the IWC and required by the U.S. government; and a Memorandum of Understanding (MOU) between the Tribe and the U.S. government on how the two entities would co-manage the hunt. Fortunately, the documentation underlying the Alaska Eskimo hunt for bowhead whales served as models for the Tribe. The Tribe’s preparations had progressed sufficiently that, during the 1995 IWC meeting, the U.S. delegation informed the

Commission that “...*following the recovery of the Eastern Pacific stock of gray whales the Makah Tribe had expressed an interest in taking five gray whales for ceremonial and subsistence purposes. The USA might therefore wish to submit a formal proposal for this at a future date (IWC, 1996).*”

10. In 1996 (IWC, 1997), the U.S. presented a request to IWC seeking an annual take of 5 ENP gray whales, with a maximum of ten strikes, under the established category of Aboriginal Subsistence Whaling, and emphasized that it would not be a commercial hunt. The need was defined as one whale per traditional Makah village. The United States spoke of the 1,500-year long tradition of subsistence whaling by the Makah Tribe and its wish to continue this hunt as an essential part of the Tribe’s cultural renaissance and identity. The U.S. proposal noted that, although the commercial exploitation and resulting depletion of gray whales in the late 1800s had led to the suspension of whaling since 1926, the Tribe had continued aspects of the whaling tradition since that time. In the Commission’s plenary session, eleven member governments spoke in support of the U.S. proposal (Denmark, St. Vincent and the Grenadines, the Russian Federation, Norway, Grenada, Japan, the Republic of Korea, Monaco, St. Lucia, France, and Sweden). Eight member governments spoke in opposition (Australia, Netherlands, Spain, Chile, People’s Republic of China, New Zealand, and Mexico), citing among other concerns: that evidence of subsistence need had not been clearly demonstrated; that, given the 70-year gap, there were doubts about the continuity of traditional dependence on the hunt; that there were doubts about the humane killing of the whales; and that greater clarity was needed regarding the proposal meeting the ASW provisions. At a later stage of the meeting, the United States announced that, after consultation with Makah representatives, it was withdrawing its proposal and

requested that the IWC defer consideration until the following year when the existing catch limit for ENP gray whales would expire and the needs of the Chukchi people would also be reviewed.

11. At the 1997 meeting, I led the U.S. delegation in the absence of the U.S. Commissioner and so was responsible for on-the-scene implementation of strategy and tactics pertaining to ASW, among other issues. In the ASW Subcommittee (IWC, 1998), the Russian Federation submitted a needs statement for 140 ENP gray whales, noting that in some prior years the IWC had set a catch limit of up to 169 per year for gray whales that had been taken exclusively by its Natives. The Russian Federation discussed the problems it had faced that had prevented it from taking that number in the recent past and the changes made to improve the hunt. The U.S. submitted a separate needs request for a catch limit of up to five gray whales for the Makah Tribe that would enable it to renew the cultural tradition of whaling in the community. The United States made the following points in support of the proposal: “(1) *there is no conservation problem with the stock; (2) the Makah have a 1,500 year tradition of whaling which has been of central importance to their culture; (3) a formal treaty with the U.S. government, dating from 1855, had preserved the right of the Makah to take whales and other marine resources; (4) since the last IWC meeting the Makah had made considerable efforts to address the concerns expressed by some delegations (safe, humane and effective hunt; training in hunting techniques; subsistence use of whales; no waste of whale products).*” The United States acknowledged that some dissent existed domestically concerning the Makah proposal. The Makah representative emphasized the central focus and importance of whaling to the Makah culture and the improvements to the proposed weaponry expected to improve the killing

efficiency of the hunt. In its report on the proposed hunting of gray whales, the SC indicated that a catch limit of up to 482 whales over three years would be sustainable and allow the stock to stabilize above its MSY level.

12. Prior to the 1997 IWC meeting, the United States and Russian Federation had consulted and agreed to submit a joint proposal to amend the Schedule that would cover the needs of their respective Native hunters for ENP gray whales.

Consequently, in the plenary session of the IWC meeting, the Russian Federation and the United States submitted a joint proposal to amend the Schedule for a catch limit of 620 ENP gray whales over five years (1998, 1999, 2000, 2001, 2002), with an annual limit of 140 (IWC, 1998). Many delegations drew a distinction between the two needs requests, with Australia specifically noting that subsistence whaling involved a continuous dependence that it believed the Makah situation did not meet, and also referred to the internal dissent and court proceedings in the United States. New Zealand also expressed doubts about the need. Austria and Finland agreed and suggested adding the words “*whose subsistence and cultural needs have been recognized by the IWC*” to the preambular paragraph describing who can take the whales under the proposal. In the U.S. view, this language was at odds with the 1979 Resolution on Bering Sea Bowheads that stated: “*The Commission intends that the needs of the aboriginals of the United States shall be determined by the government of the United States of America*” (IWC, 1980). It was understood that, through the 1980 Resolution on the Documentation of Aboriginal Need, this view had also been extended to hunts by aboriginals of other member countries (IWC, 1981). Completing the debate, while expressing reservations about the Makah need, Netherlands, Switzerland, Spain, Chile, Brazil, South Africa, and Solomon Islands indicated they would not break a consensus if one existed.

Moreover, Denmark, Monaco, Norway, Ireland, and Japan (despite certain concerns unrelated to need) supported the joint proposal. After further consultations to refine the language proposed by Austria, a broad consensus was reached to accept the joint proposal with the addition of the wording “*whose traditional aboriginal subsistence needs have been recognized*”. No member country chose to break the consensus by requesting a vote and the amendment was adopted. Although the United States believed that the needs of the Makah had been recognized through adoption of the catch limit, the language of the schedule amendment suggests that this was not a unanimous view of the IWC members and that a few members wished to keep this issue open for later resolution.

13. In 1999, NMFS authorized the Makah Tribe to hunt gray whales in accordance with the Schedule amendment adopted by the IWC in 1997 and the bilateral agreement with the Russian Federation allocating the approved catch limit. This authorization was consistent with the view of the U.S. government that the traditional aboriginal subsistence needs of the Makah Tribe had been recognized, as required by the applicable Schedule provision. On 17 May 1999, the Makah Tribe successfully struck and landed one gray whale under that authorization.

14. Subsequent to this initial decision by the IWC in 1997 to include the Makah Tribe under the gray whale ASW catch limit, similar joint proposals by the Russian Federation and the United States for ENP gray whales to extend the catch limit have been reviewed and approved by the IWC. A summary follows:

2002—Although in the ASW Subcommittee Australia, the UK and Mexico had raised concerns about the 70-year hiatus of the Makah hunt and New Zealand and

Mexico had questioned the extent of community support, the Commission adopted by consensus the proposed catch limit of 620 over the next five years (2003-2007) without discussion in plenary (IWC, 2003). As with the Schedule amendment adopted in 1997, the 2002 amendment retained the language concerning those “whose traditional aboriginal subsistence and cultural needs have been recognized.”

2004—In 2003 the IWC established a small working group to review how best to achieve consistency across all ASW included under Schedule paragraph 13. That group, in 2004, suggested deleting the language in the ENP gray whale provision which stated that the catch limit applied only to those whose traditional aboriginal subsistence and needs have been recognized by the IWC. In ASW Subcommittee discussions, the United Kingdom and New Zealand instead suggested applying that language equally to all indigenous whaling operations. New Zealand noted that the clause had been adopted originally “as a result of the Makah quota request.” The United States replied that the clause was not necessary because it is “the Commission itself [that] recognizes needs when it approves a quota request.” The United States also reiterated that the needs of the Makah Tribe had been recognized by the IWC both in 1997 and in 2002 when it approved requests for quotas put forth on the Tribe’s behalf. In the end, the Subcommittee endorsed the working group’s report and sent the proposed Schedule amendment forward for consideration at the Commission’s plenary session,

In the plenary, the Russian Federation introduced a somewhat revised Schedule amendment, explained the changes in it and, citing the fragile balance that had been made amongst members, sought its adoption by consensus. As in the original

proposal, the language on “whose traditional aboriginal subsistence and cultural needs have been recognized” had been deleted. In the ensuing consideration of the proposal several members agreed with the view espoused by the United States and commented that “...*the appropriate tests of need would continue to apply and that it is the Commission itself that recognizes need when it approves aboriginal subsistence whaling quotas.*” The IWC ended up adopting both the working group report and the revised proposed Schedule amendment by consensus (IWC, 2005). This action finally put to bed any remaining question as to whether the IWC had recognized the subsistence needs of the Makah Tribe and whether it qualified for a share of the gray whale catch limit. In unanimously agreeing to delete the clause about the recognition of needs, the IWC was fully aware of its prior applicability to the Makah Tribe and that a decision to strike it would underscore that it is the adoption of the catch limit itself and not some subsequent action through which the IWC recognizes subsistence and cultural needs of user groups.

2007–In 2007, there were no adverse comments to extending the previous 5-year catch limit for another five years (2008-2012) in either the ASW Subcommittee or the Commission and it was adopted by consensus (IWC, 2008). More important, as had been decided in 2004, the 2007 amendment did not include the language about recognition of subsistence and cultural needs, nor did subsequent amendments adopted in 2012 and 2018. This adds further support to the view that the IWC had generally adopted the U.S. position that the Makah Tribe met the criteria for ASW whaling and that recognition of the Tribe’s traditional subsistence and cultural need for gray whales was no longer an issue.

2012–The United States, Russian Federation, and St. Vincent and the Grenadines (SV&G) bundled together into a single proposal the proposed extensions of their respective status quo ASW catch limits, including that for ENP gray whales in the case of the Russian Federation and the United States. These countries sought extensions for another 6 years (2013-2018). In the ASW Subcommittee, the need statements for the Russian Federation and the United States were accepted without adverse comment, although in plenary, Austria requested clarification of the domestic legal situation for the Makah hunt. In plenary, representatives of the South American group of members reported that, while there was consensus among them to adopt the Schedule Amendments of the Russian Federation and the United States for catch limits of bowhead and gray whales, this was not the case for the humpback whales taken by SV&G. The Chair decided he did not have a consensus and so proceeded to hold a vote on the bundled proposals, including that for SV&G. The outcome was 48 votes in favor, 10 against, 2 abstentions and one not participating, giving a better than three-quarters majority vote and adoption of the bundled Schedule amendments. On the other hand, Denmark, on behalf of Greenland, had decided to pursue its proposal separately, which ultimately failed to pass (IWC 2013).

15. One goal of my declaration is to describe the tools that are available to the IWC to manage stocks subject to ASW hunts and to summarize how they have been applied to the proposed hunting of gray whales by the Makah Tribe. In paragraph 49 of his declaration on behalf of AWI, D.J. Schubert stated that, although the IWC approved the United States’ request for a gray whale catch limit on behalf of the Tribe in 1997 and four additional times since, AWI has “never concurred” with these decisions. Mr. Schubert contends in paragraphs 49-53 of his declaration that

the Tribe does not qualify for a catch limit because it does not meet the requirements of the ASW definitions, particularly because the Tribe has no continuing dependence on whaling and its use of whales and does not have a nutritional, subsistence, and cultural need for whales or whale products. At the first opportunity after the ENP gray whale was removed from the U.S. Endangered Species list, the Makah took expeditious action to seek authorization to resume its hunt for these whales. Furthermore, from the documents submitted to U.S. agencies in support of efforts to obtain authorization of a catch limit from the IWC and in this proceeding, it appears that the Tribe preserved its whaling culture during the 70-year hiatus through its oral history regarding whaling, whaling practices and uses of whales, and its preservation of traditional rites, art, dances and songs pertaining to whaling. Clearly, the U.S. government has, for more than 20 years, taken the position that the Makah Tribe meets the requirements for ASW established by the IWC.

In the end, it is irrelevant whether AWI believes the Makah satisfy the IWC's requirements. The IWC is the final arbiter on whether the Makah hunt meets those criteria and whether its adoption of U.S. proposals on behalf of the Tribe multiple times over the past two decades is valid or not. As explained in the narrative provided above, the tools for taking action to approve that hunt or not are readily available in the IWC's Rules of Procedure. While it is true that many delegations expressed concerns when the joint Russia-U.S. proposal for ENP gray whales was first considered at the 1997 IWC meeting, both in the ASW Subcommittee and in plenary, no member government chose to call for a vote but rather agreed to a compromise to achieve consensus. Moreover, in subsequent reviews of the Makah hunt, fewer objections were raised and some former opponents even became

supporters. Beginning in 2004, knowing full well that the joint U.S.-Russian proposal included hunting by the Makah, the IWC dropped the limitation that the catch limit applied only to those whose subsistence and cultural needs have been recognized. Finally, as demonstrated by the defeat of the Danish ASW proposal on behalf of Greenland in 2012, the IWC can use its voting procedure to prevent the adoption of proposed ASW catch limits with which it disagrees. This has never been done with respect to the joint proposals seeking catch limits for ENP gray whales on behalf of the United States and Russia.

I declare, under penalty of perjury under the laws of the United States, that the foregoing is true and correct to the best of my knowledge, information, and belief.



Michael F. Tillman, Ph.D.

August 6, 2019

List of References Cited

IWC. 1978a. Report of the Scientific Committee. Rep. int. Whal. Comm. 28: 38-92.

IWC. 1978b. Chair's report of the 29th meeting. Rep. int. Whal. Comm. 28:18-37.

IWC. 1979a. Report of the Scientific Committee. Rep. int. Whal. Comm. 29: 38-105.

IWC. 1979b. Chair's report of the Special Meeting, Tokyo, December 1977. Rep. int. Whal. Comm. 29: 2-6

IWC. 1980. Chair's report of the 31st meeting. Appendix 4, Resolution on Bering Sea Bowheads. Rep. int. Whal. Comm. 30: 25-41.

IWC. 1981. Chair's report of the 32nd meeting. Appendix 3, Resolution on the Documentation of Aboriginal Need. Rep. int. Whal. Comm. 31: 17-4

IWC. 1989. Chair's report of the 40th meeting. Rep. int. Whal. Comm. 39: 10-30

IWC. 1992. Chair's report of the 43rd meeting. Rep. int. Whal. Comm. 42: 11-46.

IWC. 1996. Chair's report of the 47th meeting. Rep. int. Whal. Comm. 46: 15-42.

IWC. 1997. Chair's report of the 48th meeting. Rep. int. Whal. Comm. 47: 17-47.

IWC. 1998. Chair's report of the 49th meeting. Rep.int. Whal. Comm. 48: 17-45.

IWC. 2003. Chair's report of the 54th meeting. Annual Report of the Int. Whal. Comm. 2002: 5-53.

IWC. 2005. Chair's report of the 56th meeting. Annual Report of the Int. Whal. Comm. 2004: 5-58.

IWC. 2008. Chair's report of the 59th meeting. Annual Report of the Int. Whal. Comm. 2007: 7-62.

IWC. 2013. Chair's report of the 64th meeting. Annual Report of the int. Whal. Comm. 2012.

Tillman, M.F. 1980. Introduction: A scientific perspective of the bowhead whaling problem. Mar. Fish. Rev. 42: 2-5.

Tillman, M.F. 2000. The international management of aboriginal whaling. Reviews in Fish. Sci. 16(4): 1-8.

Wolman, A. and Rice, D. 1978. Current status of the Gray whale. Rep. int. Whal. Comm. 29: 275 -9.