



MARINE MAMMAL COMMISSION

30 June 2016

Ms. Kimberly Klein
U.S. Fish and Wildlife Service
Office of Marine Mammals Management
1011 East Tudor Road
Anchorage, Alaska 99503

Dear Ms. Klein:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by Quintillion Subsea Operation, LLC, (Quintillion) seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA) to take small numbers of walrus by harassment incidental to subsea cable-laying activities in the Bering, Chukchi and Beaufort Seas, Alaska, during the 2016 open-water season. The Commission also has reviewed the U.S. Fish and Wildlife Service's (FWS) 23 June 2016 notice (81 Fed. Reg. 40902) requesting comments on its proposal to issue the authorization, subject to certain conditions. The Commission provided comments in its 6 April 2016 letter to the National Marine Fisheries Service (NMFS) regarding the authorization of incidental takes for marine mammal species under NMFS jurisdiction for the same activities.

Background

Quintillion plans to install a subsea fiber-optic cable network¹ between Nome and Oliktok Point, Alaska. Approximately 1,904 km of cable would be laid using cable-laying barges and/or vessels² in waters up to 300 m in depth. The cable-laying vessels would use a dynamic positioning system (DPS) with bow, aft, and fore thrusters. The cable would be buried using a plough in waters greater than 12 m in depth. Divers, a towed sled, and remotely-operated vehicle could be used for jet burial of the cable in waters less than 12 m in depth. The proposed activities are expected to occur on up to 150 days from 15 July to 15 November 2016.

FWS preliminarily has determined that the proposed activities could modify temporarily the behavior of small numbers of walrus, but that the total taking would have a negligible impact on the affected species or stocks. FWS does not anticipate any take of marine mammals by death or serious injury. It believes that the potential for temporary or permanent hearing impairment will be at the least practicable level because of Quintillion's proposed mitigation measures. The mitigation, monitoring, and reporting measures include—

¹ For internet services.

² Herein referred to as cable-laying vessels.

- conducting in-situ sound source and sound propagation measurements for the DPS on the cable-laying vessel³ and adjusting the Level B harassment zone⁴, if necessary;
- using trained protected species observers (including Inupiat observers) to monitor the Level B harassment zone during daylight hours from when the vessel leaves to when the vessel returns to port at the end of the project;
- using various avoidance measures⁵ and speed restrictions in proximity to walruses and in poor visibility conditions;
- providing funding for passive acoustic monitoring to be conducted by the 2016 joint Arctic Whale Ecology Study/Chukchi Acoustics, Oceanography, and Zooplankton Study-extension⁶ project;
- reporting injured and dead marine mammals to FWS using its phased approach; and
- submitting a final report.

Availability of marine mammals for subsistence

Quintillion has coordinated with numerous Native Alaska communities⁷ and developed a plan of cooperation outlining measures that it would implement to minimize any adverse impacts on the availability of marine mammals for subsistence. That plan includes requirements for Quintillion to maintain the minimum approach distances and operational requirements outlined in the previous section, as well as (1) providing real-time vessel information via the automatic identification system and daily reports to the communities and communication centers, (2) monitoring the position of its vessels and avoiding subsistence activity, and (3) implementing vessel transit and routing schemes. Based on the proposed activities and mitigation measures, FWS has preliminarily determined that the proposed taking would not have an unmitigable adverse impact on the availability of walruses for subsistence use by Alaska Natives.

Sound sources considered for Level B harassment

Similar to the recently proposed authorization for BlueCrest Alaska Operating, LLC⁸, FWS indicated that Level B harassment generally occurs when walruses are exposed to underwater sounds exceeding 160 dB re 1 μ Pa. And again, it appears that FWS is applying that threshold to any source, no matter whether continuous or impulsive. The Commission is unsure of the basis for that determination given that the generic threshold for continuous sound (including sound generated

³ Sound levels associated with an anchor-handling tug also would be measured.

⁴ A Level A harassment zone does not exist for the proposed activities, which will be verified by the in-situ measurements.

⁵ FWS used an erroneous 805-km rather than 805-m avoidance zone on page 40912 of the notice—the correct zone of 805 m was stipulated on pages 40908 and 40914.

⁶ ARCWEST/CHAOZ-X.

⁷ Including the Eskimo Walrus Commission, Barrow Whaling Captains Association members and board, the Community of Wainwright, Wainwright Whaling Captains, Point Hope Community, Tikigaq Whaling Captains, the Northwest Arctic Borough, Kotzebue City Management, the Community of Kotzebue, Maniilaq Association, Kawerak Inc., the Nome Community, and Kuukpik Corporation.

⁸ See the Commission's 13 June 2016 letter.

from DPSs) is 120 dB re 1 μ Pa, which was used by Quintillion⁹ to stipulate the Level B harassment zone to be used for monitoring purposes and for estimating the number of takes. FWS stated that the take estimate would account for all animals exposed to sound levels greater than 120 dB re 1 μ Pa, including those exposed to 160 dB re 1 μ Pa or greater, but that it expects Quintillion's calculations to overestimate the number of Pacific walrus that would be taken. The Commission does not agree with that assumption and finds it particularly concerning that the applicant, rather than the agency, has recognized and used the appropriate threshold. Furthermore, FWS has itself used the 120-dB re 1 μ Pa threshold for other continuous sounds emitted during vibratory pile-driving and -removal and drilling activities (79 Fed. Reg. 58800 and 79 Fed. Reg. 51591, respectively). It is unclear why it has taken a different tack for the most recent authorizations.

Given that DPSs are considered continuous sound sources, a Level B harassment threshold of 120 rather than 160 dB re 1 μ Pa should have been referred to throughout the *Federal Register* notice, including in the mitigation and monitoring sections. Therefore, the Commission recommends that FWS remove all reference to the 160-dB re 1 μ Pa threshold for continuous sound sources in the final authorization. The Commission refers FWS to NMFS's final authorization for Quintillion's cable-laying activities (81 Fed. Reg. 40274) and strongly suggests that it coordinate with NMFS for future authorizations and any questions it may have regarding the appropriateness of thresholds.

Reporting measures

In one part of the *Federal Register* notice, FWS stated it would require Quintillion to report immediately any injury or mortality due to proposed activities, but in another portion it would require reporting the incident only within 24 hours. In neither instance would FWS require Quintillion to cease or suspend its activities. NMFS, on the other hand, as part of its standard reporting measures, would require not only the activities to cease but also would not allow the activities to resume until it was able to review the circumstances of the prohibited take. NMFS would work with Quintillion (or any other applicant) to determine what is necessary to minimize the likelihood of further prohibited take, and Quintillion would not be able to resume its activities until notified by NMFS via letter, email, or telephone (81 Fed. Reg. 17674). The Commission agrees with such measures and is unsure why FWS did not propose a similar approach. Thus, the Commission recommends that FWS require Quintillion to (1) report immediately any walrus¹⁰ injury or mortality and (2) cease its activities until such time that FWS reviews the circumstances of the prohibited take, determines whether additional mitigation measures are necessary to minimize further taking, and notifies Quintillion that it can resume its activities.

⁹ In addition, FWS incorrectly asserted that Quintillion was requesting incidental take by Level B harassment of walrus from disruption of behavioral patterns and exposure to sound levels exceeding 160 rather than 120 dB re 1 μ Pa (81 Fed. Reg. 40904). Quintillion made no reference to the 160-dB re 1 μ Pa threshold for the DPSs in its application.

¹⁰ Or polar bear take.

Timing of activities


Although Quintillion's application indicated that cable-laying activities would begin 15 June and end on 14 October (Appendix A), the *Federal Register*¹¹ noted that the incidental taking of walrus would be authorized from 15 July–15 November. NMFS's authorization, on the other hand, is valid from 1 June–31 October (81 Fed. Reg. 40274), reflecting the timeframe included in Quintillion's application. The Commission has a few concerns regarding those inconsistencies.

First, FWS's notice requesting public comment was not published until 23 June 2016, and therefore the resulting authorization cannot be issued until 26 July¹² at the earliest. It is unclear if any activities have yet occurred or will occur prior to that date. Since FWS received Quintillion's application in October 2015¹³, well before activities were proposed to begin, the authorization should have been published in a timelier manner. More importantly, FWS sent Quintillion a letter dated 27 May indicating that it would not be able to complete the authorization process before the proposed 1 June start date and that if Quintillion chose to begin the proposed activities prior to receiving an authorization, it would assume risk of liability for take should any result. Thus, Quintillion was put in an untenable position through no fault of its own.

Second, FWS indicated that the proposed activities would occur for 150 days from 15 July to 15 November. Given that the authorization likely will not be issued until late July, it would be impossible for the proposed activities to last that long unless they extend beyond November and the open-water season. Therefore, the Commission recommends that, in the future, FWS take all necessary steps to ensure that it publishes and finalizes proposed incidental take authorizations before the planned start date of the proposed activities and if unable to do so, adjust the period of activities and estimated numbers of takes (if based on the number of days of activities) covered by the authorization accordingly. If FWS is unable to adhere to the statutory time frames for processing incidental take authorizations on a routine basis, more systematic changes to the office(s) handling these authorizations are needed.

I trust these comments will be helpful. Please let me know if you or your staff has questions with regard to the Commission's recommendations.

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

cc: Jolie Harrison, National Marine Fisheries Service, Office of Protected Resources

¹¹ Page 40905 of the notice also indicated a timeframe of 1 June to 31 October for mobilization, preliminary work, cable laying, post-burial work, and demobilization—a timeframe that comports with the information contained in the application itself.

¹² The public comment period closes on 25 July.

¹³ With a revision received on 2 February, which was more than 4 months ago.