



MARINE MAMMAL COMMISSION

24 April 2020

Ms. Jolie Harrison, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by the Gastineau Channel Historical Society (GCHS) seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act to take small numbers of marine mammals by harassment. The taking would be incidental to constructing a mooring float near Juneau, Alaska. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 1 April 2020 notice (85 Fed. Reg. 18196) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

GCHS plans to construct a mooring float at Sentinel Island. Operators would install up to six 24-in steel pipe piles using a vibratory hammer, impact hammer, and/or down-the-hole (DTH) hammer. GCHS expects activities to take up to six days, weather permitting. It would limit pile-driving activities to daylight hours only.

NMFS preliminarily has determined that, at most, the proposed activities could cause Level A and B harassment of small numbers of seven marine mammal species. NMFS anticipates that any impact on the affected species and stocks would be negligible. NMFS also does not anticipate any take of marine mammals by death or serious injury and believes that the potential for disturbance will be at the least practicable level because of the proposed mitigation measures. The proposed mitigation, monitoring, and reporting measures include—

- ceasing heavy machinery activities if any marine mammal comes within 10 m of the equipment;
- using standard soft-start, delay, and shut-down procedures¹;

¹ The Commission informally noted that inconsistent clearance times were specified amongst GCHS's application, the *Federal Register* notice, and the draft authorization. NMFS indicated that it would require GCHS to implement a 15-minute clearance time for pinnipeds and odontocetes and a 30-minute clearance time for mysticetes in the final authorization.

- using three qualified land-based protected species observers (PSOs) to monitor the Level A² and B harassment zones for 30 minutes before, during, and for 30 minutes after the proposed activities;
- using delay and shut-down procedures, if a species for which authorization has not been granted or if a species for which authorization has been granted but the authorized number of takes already has been met, approaches or is observed within the Level A or B harassment zone;
- reporting injured and dead marine mammals to the Office of Protected Resources and the Alaska Regional Stranding Coordinator, as soon as feasible; and
- submitting a draft and final report.

Availability of marine mammals for subsistence use

GCHS contacted the Douglas Indian Association (DIA), Sealaska Heritage Institute (SHI), and the Central Council of the Tlingit and Haida Indian Tribes of Alaska (the Central Council) regarding the potential for the proposed activities to impact adversely subsistence hunting. NMFS specified in the *Federal Register* notice that DIA indicated that it saw no impacts that may affect its subsistence use, SHI indicated that there is little known harbor seal hunting in the project area³, and the Central Council did not respond (85 Fed. Reg. 18209). GCHS also specified in its application that SHI *requested* that adequate public notice be given to avoid any unfortunate incidents regarding hunters in the area. GCHS indicated that it would require the contractor to provide public notice 7 days in advance of the project and again 2 days before construction commences in the local media and to post information signage on the board at the Amalga Harbor boat launch 7 days prior to commencement of construction activities. The Commission informally noted that GCHS's measures are similar those actions taken elsewhere in Alaska to ensure that the communities are notified in advance of the activities consistent with other authorizations⁴ and should be mentioned in the *Federal Register* notice for final authorization issuance. NMFS indicated it saw no justification of the need or benefit of doing so. The Commission strongly disagrees. Many Native Alaskan communities rely on subsistence hunting and fishing as a primary source of food and as a source of cultural well-being. If any Native Alaskan community indicates that it has a concern and measures should be taken to minimize unmitigable adverse impacts to subsistence use, even if those measures only entail advanced notification, the concern and associated measures should be acknowledged and stated as such in any *Federal Register* notice for the related proposed and final authorizations. Similar to the Commission's recommendation in its [9 January 2020 letter](#), the Commission recommends that NMFS include, in the *Federal Register* notices for draft and final authorizations, whether the local

² The Commission informally noted that NMFS did not increase the shut-down zone from 7 to 10 m for mid-frequency cetaceans during vibratory pile driving in Table 7 in the *Federal Register* notice or Table 2 in the draft authorization but increased the zones that were less than 10 m to at least 10 m in all other instances (e.g., mid-frequency cetaceans during impact pile driving and otariids during impact and vibratory pile driving), which is consistent with other authorizations. NMFS indicated that it would increase the shut-down zone to 10 m in the final authorization.

³ The Commission informally noted that NMFS did not include all of SHI's response in the *Federal Register* notice. As noted in the application, SHI indicated that the project will likely result in temporary disturbances, however, it believes that other locations in the area can absorb these temporary displacements without any significant impacts on the availability of harbor seals for subsistence uses. The Commission indicated that this information is pertinent and should have been included. NMFS indicated it would include the information in the *Federal Register* notice for final authorization issuance.

⁴ See e.g., 84 Fed. Reg. 70289.

Native Alaskan communities that were contacted conveyed any concerns regarding subsistence use and how those concerns will be addressed by either the applicant or NMFS.

DTH drilling

Similar to issues delineated in the Commission's [20 April 2020](#), [23 March 2020](#), and multiple other recent letters, NMFS's characterization of DTH drilling for GCHS's authorization is inconsistent with other recent authorizations. Those letters should be reviewed in concert with this letter and the justification provided therein should be considered herein as well. NMFS characterized DTH drilling as a *non-impulsive*, continuous source rather than an *impulsive*⁵, continuous source⁶ as referenced in other recent authorizations (City of Astoria, 84 Fed. Reg. 68133 and Halibut Point Marine Services, LLC (HPMS), 85 Fed. Reg. 21400). In addition to the mischaracterization of the source, NMFS used an underestimated and inappropriate source level from Denes et al. (2016)⁷ for estimating the extents of the Level A harassment zones, as compared to other recent authorizations⁸ (City of Astoria, 84 Fed. Reg. 68139⁹ and CTJV and Hampton Roads Connector Partners (HRCP), 85 Fed. Reg. 16061 and 85 Fed. Reg. 16194, respectively¹⁰). To estimate the Level A harassment zones and determine whether and how many Level A harassment takes should be authorized, the sound source must be characterized correctly to ensure that the appropriate Level A harassment threshold¹¹ is used and the source level must be sufficiently accurate. NMFS has failed to do both. The source level from Denes et al. (2016) is based on 1-sec averages rather than per pulse metrics for peak sound pressure level (SPL_{peak}), SPL_{rms} , and single-strike sound exposure level (SEL_{s-s}) as used for impulsive sources. That is, the source level from Denes et al. (2016) is based on the pulses, as well as the dips in sound between the pulses, and is related only to the continuous aspect of the DTH drilling sound, not the impulsive aspect.

⁵ Chesapeake Tunnel Joint Venture (CTJV) assumed that impulsive, thus intermittent, characteristics predominated at its site when the DTH hammer was used and in-situ measurements were obtained by Denes et al. (2019; 84 Fed. Reg. 64854-64855). Denes et al. (2019) determined that approximately 7 pulses occurred during a 1-sec waveform.

⁶ In-situ measurements obtained by the Federal Aviation Administration (FAA) at Bioka Island (Guan pers. comm.) and White Pass and Yukon Route (Reyff and Heyvaert 2019) also have confirmed *impulsive*, continuous aspects of DTH drilling, as depicted in the spectrograms and time-series waveform data. Guan (pers. comm.) indicated that approximately 13 to 14 occurred during the 1-sec waveform. The Commission understands that NMFS's acoustic expert has consulted with acousticians who have conducted measurements of DTH drilling and indicated that DTH drilling has impulsive characteristics and that source levels do increase with increasing pile size, similar to impact pile driving.

⁷ NMFS assumed a source level of 166.2 dB re 1 $\mu Pa_{root-mean-square (rms)}$ at 10 m from Kodiak.

⁸ And as referenced in other monitoring reports. Denes et al. (2019) indicated that the source levels were 190 dB re 1 μPa_{peak} , 180 dB re 1 μPa_{rms} , and 164 dB re 1 $\mu Pa^2\text{-sec}_{single-strike (s-s)}$ at 10 m. Reyff and Heyvaert (2019) indicated that the source levels were 199 dB re 1 μPa_{peak} , 184 dB re 1 μPa_{rms} , and 179 dB re 1 $\mu Pa^2\text{-sec}$ at 10 m—the source level based on sound exposure level was *not* based on a single strike, as is standard for impact pile driving. Reyff and Heyvaert (2019) also determined that approximately 10 pulses occurred during a 1-sec waveform.

⁹ In which the source level for impact installation of 24-in piles and the related Level A harassment zones were used as proxies for the Level A harassment zones for DTH drilling. NMFS used source levels of 200 dB re 1 μPa_{peak} , 187 dB re 1 μPa_{rms} , and 171 dB re 1 $\mu Pa^2\text{-sec}_{s-s}$ at 10 m.

¹⁰ In which the in-situ measured source levels from Denes et al. (2019) of 190 dB re 1 μPa_{peak} , 180 dB re 1 μPa_{rms} , and 164 dB re 1 $\mu Pa^2\text{-sec}_{s-s}$ at 10 m were used for DTH drilling.

¹¹ A point to note, Level A harassment thresholds are based on whether the source is considered *impulsive* or *non-impulsive*. The Level B harassment thresholds are based on whether the source is considered *intermittent* or *continuous*. Level A harassment thresholds for impulsive sources are 13 to 18 dB less than those for non-impulsive sources based on the relevant functional hearing group (see Table 3 of the *Federal Register* notice).

The Commission further notes that, consistent with its [12 March 2020 letter](#) involving HRG surveys, NMFS should not presume that sources that operate with a repetition rate greater than 10 Hz¹² are considered non-impulsive sources and only those sources with a repetition rate equal to or less than 10 Hz¹³ are considered impulsive sources¹⁴. Level A harassment involves the potential for injury¹⁵, it does not consider whether an animal can perceive each individual pulse. Impulsive sounds can be injurious when a source emits a single pulse or a multitude of pulses. NMFS (2018) specifically defined impulsive sources as those that produce sounds that are typically transient, brief (less than 1 second), broadband, and consist of high peak sound pressure with rapid rise time and rapid decay⁸ (ANSI 1986, National Institute for Occupational Safety and Health (NIOSH) 1998, ANSI 2005a). DTH hammers emit sound that (1) is brief with multiple pulses emitted within 1 second, (2) is broadband, and (3) exhibits a high peak pressure and both a rapid rise time and decay. NMFS (2018) included no criteria associated with repetition rate in its definitions of impulsive and non-impulsive sources. Additionally, the repetition rate of any DTH hammer depends on hardness of the rock and drilling depth. Neither of those parameters affects the impulsive nature of the hammer, they merely affect how rapidly the drill bit strikes the rock's surface. Furthermore, any presumption regarding the use of shaft size¹⁶ or DTH drill bit size for determining whether a source is impulsive or non-impulsive is unfounded. Size of shaft and drill bits have an effect on the amplitude of the signal emitted, not on whether the signal is impulsive or non-impulsive. In short, a source is considered impulsive based on the characteristics of the signal¹⁷, not the repetition rate of the hammer¹⁸ or the size of the shaft or drill bit¹⁹. It is imperative that decisions made by NMFS regarding whether DTH drilling should be defined as impulsive or non-impulsive²⁰ and what, if any, assumptions regarding shaft or drill bit size are valid in that assessment be made by NMFS's acoustic experts²¹.

As alluded to herein, for complex sources like DTH hammers, sound levels must be analyzed in two separate manners. Individual pulses must be analyzed to estimate the source levels associated with the impulsive aspects of the sound²²; while a specific time series of the sound must be averaged to estimate the source levels associated with the continuous aspects of the sound²³, similar to vibratory pile driving. Because none of the monitoring reports have included the

¹² Or 20 Hz based on American National Standards Institute's (ANSI; 2005b) standard for predicting long-term community response to in-air sound and perceptibility of those sounds. Neither the 10- nor 20-Hz repetition rate is based on ANSI standards for underwater sound.

¹³ Or 20 Hz.

¹⁴ Justification for use of the 10-Hz repetition rate cut off was never provided in its original use by JASCO Applied Sciences.

¹⁵ Based on physiological damage.

¹⁶ Or pile size.

¹⁷ Southall et al. (2007) considered a source impulsive if the SPL_{rms} measured over a short window (0.035 sec) is more than 3 dB greater than the SPL_{rms} over a longer window (1 sec). Denes et al. (2019) and Reyff and Heyvaert (2019) confirmed the impulsive nature of DTH drilling based on Southall et al. (2007) in both of their reports—the difference was 5 dB for Denes et al. (2019) and 3–5 dB depending on the hydrophone for Reyff and Heyvaert (2019).

¹⁸ Reyff and Heyvaert (2019) echoed this and stated specifically that there is no definition of repetitive rate that can define a sound as impulsive or continuous—continuous was further defined as non-impulsive by the authors.

¹⁹ Guan (pers. comm.) also has confirmed that DTH drilling of 18-in piles was considered impulsive based on the Southall et al. (2007) criteria noted herein and a greater than 3-dB difference.

²⁰ And, thus, what Level A threshold should be used.

²¹ That is, those experts with a background in underwater acoustics and bioacoustics.

²² As was done for Denes et al. (2019), Reyff and Heyvaert (2019), and Guan (pers. comm.).

²³ As was done for Denes et al. (2016; 1-sec averages) and Dazey et al. (2012; 30-sec averages).

appropriate analyses or provided DTH drilling source level data in both manners²⁴, NMFS must use source levels analyzed in the two separate manners from two different monitoring reports until additional data are available and analyzed appropriately *or* until previous data are reanalyzed accordingly. Until the relevant data have been analyzed appropriately, the Commission recommends that, for *all authorizations* involving DTH drilling including GCHS's final incidental harassment authorization, NMFS (1) use source level data from Denes et al. (2019)²⁵, its Level A harassment thresholds for impulsive sources, and the relevant expected operating parameters²⁶ to estimate the extents of the Level A harassment zones²⁷, (2) use source level data from Denes et al. (2016)⁷ and its Level B harassment threshold of 120-dB re 1 $\mu\text{Pa}_{\text{rms}}$ for continuous sources to estimate the extents of the Level B harassment zones, (3) ensure the shut-down zones²⁸ are reasonable to minimize unnecessary delays and enable the activities to be completed in a timely manner, and (4) ensure that the numbers of Level A and B harassment takes are sufficient based on the resulting zones, including in GCHS's case the Level A harassment takes. If NMFS does not revise the Level A harassment zones based on a more appropriate proxy source level and the Level A harassment thresholds for impulsive sources, the Commission recommends that NMFS explain why it does not consider a DTH hammer to be an *impulsive*, continuous sound source.

If NMFS believes that sufficient data are not available to characterize DTH drilling appropriately at this time, then the Commission recommends that NMFS require all applicants that propose to use a DTH hammer to install piles, including GCHS, to conduct in-situ measurements, ensure that signal processing is conducted appropriately²⁹, and adjust the Level A and B harassment zones accordingly. Because the majority of the recent authorizations involving coastal construction projects include use of DTH hammers, it is imperative that this sound source be characterized appropriately and accurate source levels be provided accordingly. Furthermore, action proponents have not described DTH drilling with consistent terminology³⁰ or provided the relevant operational

²⁴ Although Reyff and Heyvaert (2019) provided some 1-sec averaged data, they only collected data during a portion of the overall drilling for the two piles measured.

²⁵ 190 dB re 1 $\mu\text{Pa}_{\text{peak}}$ and 164 dB $\mu\text{Pa}^2\text{-sec}_{\text{s-s}}$ at 10 m. Since a SEL_{s-s} source level is available, the pulse duration (e.g., 100 msec) does not need to be incorporated.

²⁶ Level A harassment zones for impulsive sources are based on the number of pulses expected to be emitted in a given day. The number of pulses should be based on the operational parameters (i.e., pulses per minute and minutes of drilling per shaft to yield pulses per shaft) and the number of shafts to be drilled in a given day, not based on unsubstantiated assumptions (e.g., a 50-percent reduction in pulses expected to be emitted; 84 Fed. Reg. 64863, or the assumption that an animal would remain in the area for only one hour or two).

²⁷ Assuming at most 10 hours of DTH drilling activities per day, consistent with Table 4 in the *Federal Register* notice and the 2 hours it would take to install with a vibratory hammer (85 Fed. Reg. 18198), and 7 strikes per second consistent with CTJV and HRCP's authorizations (85 Fed. Reg. 16061 and 85 Fed. Reg. 16194, respectively), the Level A harassment zones would be at least 2,156 m for low-frequency cetaceans, 78 m for mid-frequency cetaceans, 2,568 m for high-frequency cetaceans, 1,154 m for phocids, and 84 m for otariids. If the number of strikes per second were estimated to be 10, the Level A harassment zones would be even larger.

²⁸ In this case, a shut-down zone of 100 m would be more reasonable than 1,175 m for phocids.

²⁹ Sound levels associated with each pulse should be extracted and analyzed separately as single strikes to estimate the source levels used to determine the range to Level A harassment for the *impulsive* aspects of DTH drilling; while sound levels should be averaged across 1 sec for the full duration of installing the pile to estimate the source level used to determine the range to Level B harassment for the *continuous* aspects of DTH drilling.

³⁰ DTH drilling, DTH hammering, rock socket drilling, anchor drilling, tension anchor drilling, pile drilling, etc. are all used to describe the same activity.

information³¹ and characteristics³² in their applications. The Commission recommends that NMFS (1) require action proponents to provide the necessary operational information³¹ and characteristics³² for DTH drilling in each relevant application irrespective of what terminology is used, (2) encourage action proponents to use consistent terminology regarding DTH drilling in all relevant applications, and (3) use consistent terminology in all future *Federal Register* notices and draft and final authorizations that involve DTH drilling.

Take estimates

NMFS proposed to estimate the number of harbor seal and humpback whale takes based on the number of times an individual animal could surface or be sighted within the Level B harassment zone on a given day (85 Fed. Reg. 18208). That approach is inconsistent with *all* previous incidental harassment authorizations and rulemakings and NMFS's long-standing policy that an individual can be taken only once on a given day. Specifically, for harbor seals—

- NMFS assumed that no more than 134 seals would occur in the area based on the 95 percent confidence interval (CI) for the Marine Mammal Lab's (MML)³³ survey unit CF13³⁴ (85 Fed. Reg. 18208). NMFS did not account for the fact that seals from CF11 have the potential to be taken in addition to those from CF13.
- NMFS indicated that seals surface every four minutes based on Klinkhart et al. (2008)³⁵, which would equate to 15 sightings/hour (85 Fed. Reg. 18208). NMFS's method assumed that each surfacing would be enumerated as a new take, which is inconsistent with its own policy. Further, dive times have no bearing on Level B harassment takes that were estimated based on haul-out counts and days of activities in lieu of animat modeling that incorporates such data.
- NMFS then assumed that seals spend 50 percent of their time hauled out (85 Fed. Reg. 18208), which conflicts with its statement earlier in the *Federal Register* notice that seals haul

³¹ Hammer and drill bit model, hammer energy, bit size, shaft size, etc. None of which were provided by GCHS.

³² The number of shafts to be drilled per day and pulses per minute and minutes of drilling per shaft to yield pulses per shaft.

³³ MML's abundance estimates were calculated based on haul-out counts during aerials surveys and haul-out behavior derived from telemetry deployments (i.e., haul-out correction factors;
<https://noaa.maps.arcgis.com/home/item.html?id=e69222ad91564422aba9ee0d2e70bfe2>).

³⁴ The Commission informally noted that MML's survey unit CF11 (715 seals=95 percent CI, consistent with NMFS's approach for CF11) is adjacent and parallel to GCHS's Level B harassment zone and should have been included in the abundance estimate for determining the number of seals with the potential to be taken. NMFS responded that CF13 is in the Level B harassment zone and CF11 is not. MML conducts its surveys based on land-based haul-out sites, thus the survey units depicted in ArcGIS encompass the land/islands, not all of the surrounding water. CF11 includes Shelter Island, Lincoln Island, Ralston Island, and Hump Island, some of which are within 2–3 km of the Level B harassment zone and closer to where the two far-field PSOs would be stationed. Thus, PSOs could observe seals that move into the area from CF11, just west of the Level B harassment zone, rather than seals swimming approximately 4–12 km southwest from CF13.

³⁵ The Commission informally noted that Klinkhart et al. (2008) is a fact sheet from ADFG that includes no references for any of the underlying information.

out for 44 percent of their time³⁶ (Pitcher and Calkins 1979³⁷, Klinkhart et al. 2008³⁸). None of NMFS's purported haul-out percentages, or time spent in the water, are supported or substantiated³⁹. Estimating Level B harassment takes using haul-out counts does not incorporate time or tidal fluctuations⁴⁰.

- NMFS ultimately proposed to authorize 36,180 takes of harbor seals based on 134 seals being taken up to 45 times on six separate days of activities (85 Fed. Reg. 18208). NMFS's estimate is a vast overestimate of the number of harbor seal takes.
- NMFS indicated in Table 6 that the percent of the stock of harbor seals that could be taken was calculated assuming 804 unique individuals exposed⁴¹ (85 Fed. Reg. 18209). NMFS's assertion that 804 unique individuals would be exposed is incorrect.

NMFS similarly assumed that each humpback whale sighting would be enumerated as a separate take by the PSOs and that each individual would be taken up to three times on a given day⁴² (85 Fed. Reg. 18208). NMFS did not implement the same approach for Dall's or harbor porpoises, Steller sea lions, minke whales, or killer whales.

Other personnel at NMFS have since indicated that the agency is not contemplating authorizing more than one take of an animal per day and will not incorporate, or account for, sightings per individual per day into either the harbor seal or humpback whale take estimates for the final authorization. While the Commission appreciates that NMFS will fix this issue, the precedent-setting nature of the approach should have been recognized and the issue addressed prior to the proposed authorization publishing for public comment. In addition, NMFS has yet to agree to account for all of the harbor seals that could potentially be taken by Level B harassment on a given day, which would include those seals from CF11 as well as CF13. As such, the Commission recommends that NMFS (1) ensure that take estimates for all proposed incidental harassment authorizations and rulemakings and for GCHS's final authorization abide by its policy that an

³⁶ The Commission informally noted that NMFS assumed that seals hauled out 50 percent of the time rather than 44 percent as noted elsewhere in the notice. NMFS responded that 50 percent is more conservative. If a seal hauls out 44 percent of the time, it would be in the water the remaining 56 percent of the time. Thus, NMFS's 50-percent assumption to account for animals in the water is not conservative.

³⁷ Pitcher and Calkins (1979) used more archaic methods than are currently used to determine distribution, movement, and haul-out patterns via telemetry. They could only determine the number of days a tagged individual was hauled out relative to those days surveyed and the distances traveled when the animals were 'observed'. Pitcher and Calkins (1979) did not estimate haul-out correction factors or percentage of time hauled out or at sea.

³⁸ As the Commission informally noted, Klinkhart et al. (2008) stated that seals spend up to 80% of their time in the water in winter. No information on percentage of time hauled out is provided for any other time of year.

³⁹ The Commission informally noted that there are numerous papers on harbor seal haul-out correction factors and percentage of time hauled out. For example, Simpkins et al. (2008) provided more updated information on percentage of time harbor seals haul out. Harbor seals haul out for only 33 percent of the time at Grand Island (Simpkins et al. 2008), which is very close to the project site. This would mean harbor seals spend 67 percent of the time in the water. Regardless, MML included haul-out correction factors in its abundance estimates.

⁴⁰ The Commission informally noted that seals will enter the water at least twice per day seals due to tidal fluctuations. Given that NMFS cannot predict when GCHS's 6 hours of daily activities would occur, it should be assumed that all animals at the haul-out site would be in the water at some time during each project day. If GCHS conducts 12 hours of daily activities, which is possible, all animals would be in the water during that timeframe.

⁴¹ The Commission informally noted that 134 unique individuals would be exposed, as a new set of 134 seals were not assumed to be replaced on each of the six days.

⁴² NMFS assumed that a single group of 8 whales could be taken up to three times on each of the 6 days, equating to 144 Level B harassment takes.

individual marine mammal can be taken only once on a given day and specify that policy on its webpage⁴³, (2) increase the haul-out count from 134 to 849 seals based on the 95-percent CI for seals at CF13 *and* CF11⁴⁴ and authorize at least 5,094 takes of harbor seals⁴⁵ in the final authorization, and (3) specify that 849 individual seals could be taken and factor that number into the percentage of the stock taken and its small numbers determination. The Commission further recommends that NMFS (1) include Level A harassment takes for harbor seals and humpback whales based on the size of revised Level A harassment zone⁴⁶ for DTH drilling relative to the Level B harassment zone and (2) increase the number of Level A harassment takes for Dall's and harbor porpoises in the same manner.

The Commission has repeatedly stated that NMFS has been using pinniped haul-out counts, haul-out correction factors, and dive data⁴⁷ inappropriately and incorrectly in this and other recent authorizations. If NMFS is unsure whether a method for estimating pinniped takes is legitimate, it should consult with experts who routinely analyze and produce such data, including those experts at NMFS's Science Centers.

Mitigation, monitoring, and reporting measures

Tally of takes—Although it is unclear from both the preamble and the draft authorization whether GCHS will be keeping a running tally of the total Level B harassment takes, including observed and extrapolated takes, it is imperative that GCHS do so to ensure the takes are within the authorized limits and the authorized numbers of takes are not exceeded, particularly if NMFS does not revise the numbers of takes as recommended to include seals from CF11 and to implement effectively requirement 4(i) of the draft authorization. The Commission recommends that NMFS ensure GCHS keeps a running tally of the total takes, based on observed and extrapolated takes, for Level A and B harassment.

Unauthorized taking—As noted for other recent authorizations⁴⁸, NMFS has relaxed and effectively diminished the reporting measures when unauthorized taking (i.e., an injury or death attributed to GCHS's construction activities) occurs. GCHS's authorization⁴⁹ would require that it only report the unauthorized taking. When unauthorized taking occurs, action proponents should cease the associated activities until NMFS determines what additional measures are necessary to minimize additional injuries or deaths. To that end, the authorizations must include clear, concise, explicit measures to minimize any ambiguity of what action proponents should do in those circumstances. The Commission recommends that NMFS include in all draft and final incidental harassment authorizations the explicit requirements to cease activities if a marine mammal is injured or killed during the specified activities *until* NMFS reviews the circumstances involving any injury or death that is likely attributable to the activities *and* determines what additional measures are necessary to

⁴³ <https://www.fisheries.noaa.gov/national/marine-mammal-protection/apply-incident-take-authorization>.

⁴⁴ 134 and 715 harbor seals, respectively.

⁴⁵ 849 harbor seals x 6 days=5,094 harbor seal takes.

⁴⁶ And considering the size of the shut-down zone and/or whether animals could enter the zone undetected.

⁴⁷ e.g., see the Commission's [20 April 2020](#), [10 February 2020](#), [21 January 2020](#), [18 December 2019](#), [29 November 2019](#), [18 November 2019](#), [7 October 2019](#), [11 September 2019](#) letters.

⁴⁸ See the Commission's [10 February 2020 letter](#) for a more extensive rationale regarding this matter.

⁴⁹ Although NMFS appears to have erroneously included the contradictory requirement to immediately cease activities in the 'Proposed Mitigation' section of the *Federal Register* notice (85 Fed. Reg. 18210).

minimize additional injuries or deaths. In response to the Commission's previous recommendation regarding this matter, NMFS agreed with the Commission and included the requirement to cease activities should an animal be injured or killed during Halibut Point Marine Services, LLC's (HPMS) activities in condition 6(c) of the final authorization⁵⁰ (85 Fed. Reg. 21401). The Commission expects NMFS to include a similar requirement in GCHS's authorization since both HPMS and GCHS would be conducting the same activities (i.e., impact and vibratory pile driving and DTH drilling).

Proposed one-year authorization renewals

The Commission has ongoing concerns regarding NMFS's renewal process, which are explained and can be reviewed in its [10 February 2020](#) letter. Based on those concerns, the Commission again recommends that NMFS refrain from issuing renewals for any authorization and instead use its abbreviated *Federal Register* notice process, which is similarly expeditious and fulfills NMFS's intent to maximize efficiencies. If NMFS continues to propose to issue renewals, the Commission recommends that it (1) stipulate that a renewal is a *one-time opportunity* (a) in all *Federal Register* notices requesting comments on the possibility of a renewal, (b) on its webpage detailing the renewal process, and (c) in all draft and final authorizations that include a term and condition for a renewal and (2) if NMFS declines to adopt this recommendation, explain fully its rationale for not doing so. Despite the directive in section 202(d) of the MMPA that NMFS provide a detailed explanation for not following any of the Commission's recommendations, NMFS has not responded to the Commission's second set of recommendations in a detailed and accurate manner. Those recommendations have been included in numerous Commission letters since December 2019.

In multiple instances, NMFS has cited its response from 2 October 2019 (84 Fed. Reg. 52464)⁵¹, which published months before the Commission actually made the recommendations and did not address any aspect of those recommendations. In two other recent responses, NMFS indicated that it did not agree with the Commission but rather than provide its rationale for not following the Commission's recommendation in the notice of issuance—as it had for other Commission recommendations and comments submitted by others—NMFS indicated that it would provide a detailed explanation to the Commission of its decision within 120 days, as required by section 202(d) of the MMPA⁵². NMFS has failed to meet the statutory deadline, as it has been more than 120 days since the Commission initially made these recommendations. In addition, the Commission is very concerned about NMFS's decision to defer addressing some Commission comments and recommendations until after publication of its decision document. While providing a timely, detailed response separately to the Commission comports with NMFS's obligations under section 202(d) of the MMPA, failing to address the Commission's comments and recommendations in the decision document runs counter to the requirements of the Administrative Procedures Act. The agency is expected to provide a full and sufficient rationale supporting its action at the time the decision is made, which necessitates NMFS addressing *all* substantive comments, whether from the

⁵⁰ Condition g(c) specifically states that NMFS will work with HPMS to determine what, if anything, is necessary to minimize the likelihood of further prohibited taking and ensure MMPA compliance. HPMS must not resume their activities until notified by NMFS (<https://www.fisheries.noaa.gov/webdam/download/106019283>). NMFS included a similar requirement for the Navy's construction activities in San Diego (85 Fed. Reg. 21196 and condition 6(b) in the draft authorization).

⁵¹ See 85 Fed. Reg. 5622 from 31 January 2020, 85 Fed. Reg. 16063 from 20 March 2020. NMFS attempted to include the same response in 85 Fed. Reg. 14642 from 13 March 2020 but failed to note the appropriate reference therein.

⁵² See 85 Fed. Reg. 19305 from 5 April 2020 and 85 Fed. Reg. 21201 from 16 April 2020.

Commission or any other entity, *before* publishing a notice of issuance. That includes all recommendations from the Commission, whether or not they are addressed separately pursuant to section 202(d) of the MMPA. In its most recent response to the Commission's recommendations, NMFS stated that the current verbiage in its notices already ensures that only one renewal will be issued and that its website was revised to clarify some of the language involving renewal authorizations⁵³. As noted in its 10 February 2020 letter⁵⁴, at no place in NMFS's notices does it explicitly state that renewals are a one-time opportunity nor has NMFS updated its website to include such language⁵⁵.

Moreover, according to condition 1 in the draft authorization, NMFS proposed to issue the authorization from 15 July to 20 September 2020 rather than for one full year⁵⁶. The Commission informally inquired whether a subsequent renewal would be valid for one year as noted in section 8 of the draft authorization or for only approximately two months, consistent with condition 1 in the draft authorization. NMFS indicated it could not answer the Commission's question. It is unclear why NMFS could not address the Commission's question, given that both the *Federal Register* notice (85 Fed. Reg. 18213) and section 8(a) of the draft authorization specifically state that the renewal authorization expiration date *cannot* extend beyond one year from the expiration of the initial authorization. The Commission reiterates its informal comments that inconsistencies exist within NMFS's draft authorization, which ultimately would be present in the final authorization if they remained unchanged, and a renewal cannot be issued for a timeframe that exceeds the original timeframe under which the authorization is valid.

Please contact me if you have questions regarding the Commission's recommendations.

Sincerely,



Peter O. Thomas, Ph.D.
Executive Director

⁵³ See 85 Fed. Reg. 22140 from 21 April 2020.

⁵⁴ And as continues to be the case with NMFS's notices.

⁵⁵ Webpage <https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-harassment-authorization-renewals> has not been updated since 31 December 2019 and webpage <https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act> has not been updated since 7 February 2020. Neither webpage includes any reference to a renewal being a one-time opportunity.

⁵⁶ NMFS also did not include in section 4 of the draft authorization the measure that pile-driving activities are prohibited from 1 March to 31 May to avoid peak marine mammal abundance periods and critical foraging periods. If NMFS were to issue a one-year authorization, or renewal, that measure must be included.

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