

Jolie Harrison
Supervisor, Incidental Take Program
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
Submitted via: ITP.Laws@noaa.gov

RE: Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to a Wharf Construction Project

RIN **0648-XD282**

June 30, 2014

Dear Ms. Harrison,

Whale and Dolphin Conservation (WDC) is the leading global charity dedicated to the conservation and protection of whales, dolphins, and their habitats worldwide. WDC strongly believes that the National Marine Fisheries Service (NMFS) must deny the request by the Navy for an incidental harassment authorization (IHA) enabling the continued construction of an Explosive Handling Wharf (EHW) at Naval Base Kitsap in Bangor, Washington (NBKB). The Navy has previously requested an IHA to take marine mammals by Level B harassment during construction activity, and the authorization was granted for the last two construction periods. However, in the 2013-2014 construction season, fourteen Level A takes occurred (Department of Navy (DoN) 2014), suggesting that the current monitoring program is insufficient to detect all marine mammals that occur in and around the construction area.

NBKB is located in the Hood Canal, which is home to multiple species of marine mammals, including West Coast transient orcas, and is part of the critically endangered Southern Resident orcas' historical range. Southern Residents populated the canal until the 1980's, when the declining salmon population in the canal likely led them to seek prey elsewhere in Puget Sound¹. Sightings outside the canal suggest that Southern Residents still utilize the area near the canal, and a Navy acoustic recording in 1995 confirmed the presence of J pod members within the canal (NMFS 2008). Hood Canal salmon stocks are genetically distinct from Puget Sound and coastal stocks, enhancing the prey availability and composition of the Southern Residents in Puget Sound (Hood Canal Salmon Enhancement Group, 2014). Hood Canal was excluded from the original critical habitat designation for Southern Residents, despite its status as part of their historical range and the presence of a primary constituent element (prey) (71 Fed. Reg. 69.054).

The requested IHA does not account for any potential takes or effects on Southern Resident orcas, despite their continued presence in the area around Hood Canal and the possibility that they may re-enter the canal at any time. Current monitoring and mitigation measures are obviously insufficient, as fourteen Level A takes occurred in the last construction season, and the IHA only allowed Level B takes (DoN 2014). The Navy uses only land-based monitors, which is inadequate to detect marine mammal species that are cryptic in the water and difficult to detect. Level B harassment from vibratory pile driving is predicted for an area of 41.4 square kilometers, yet a zone of only 464 meters is monitored (DoN 2013). Acoustic monitoring may miss transient orcas, as their prey and hunting techniques require them to be quiet and stealthy (Department of Fisheries and Oceans (DFO) 2013). Transient movements are unpredictable and erratic, but they return to particular regions, including Hood Canal, to seek out known prey resources, and are present year-round on the west coast (ibid.).

¹ "Critical Habitat' for Orcas Leaves Pockets of Vulnerability, Critics Say." John Roach, National Geographic News. <http://news.nationalgeographic.com/news/2006/08/060807-killer-whales.html> Accessed June 25, 2014.

Given the number of Level A takes that occurred during the last season of construction, monitoring and mitigation techniques must be re-evaluated. The NMFS must consider the potential impacts on transient orcas and Southern Residents in the vicinity of Hood Canal. Displacement of both resident and transient orcas has been documented as a result of acoustic pollution and it is, therefore, possible that acoustic impacts may be discouraging orcas from entering Hood Canal during construction, keeping them from important habitat (Morton 2002, NMFS 2008). Orcas are a highly acoustic species, relying on sound for foraging, traveling, and socializing (Williams *et al.* 2013). Increasing chronic ocean noise, including that from construction, can mask their communication and disrupt normal behavior, impeding population growth and recovery. Construction on the EHW at NBKB occurs July-February, which includes the Southern Residents' summer and fall occupation of the Salish Sea, and transients may be present year-round.

WDC urges NMFS to deny the current IHA application until the insufficiencies in mitigation and monitoring are addressed. We request that further consideration should be given to the presence of transient and resident orcas in the area and the potential acoustic effects, and that monitoring techniques be amended to prevent further Level A takes from occurring.

Sincerely,



Colleen Weiler
Rekos Orca Fellow
Whale and Dolphin Conservation

References:

DFO, 2013. Information in Support of the Identification of Critical Habitat for Transient Killer Whales (*Orcinus orca*) off the West Coast of Canada, DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2013/025.

Department of Navy (DoN), 2013. Naval Base Kitsap at Bangor Explosives Handling Wharf 2, Bangor Washington. Marine Mammal Monitoring Plan Year 2. Department of the Navy, May 2013.

Department of Navy (DoN), 2014. Naval Base Kitsap at Bangor Explosives Handling Wharf 2, Bangor Washington. Draft Year 2 Marine Mammal Monitoring Report. Prepared by Hart Crowser, Inc. for Naval Facilities Engineering Northwest, Silverdale, WA. March 2014.

Hood Canal Salmon Enhancement Group. Annual Report 2013. <http://pnwsalmoncenter.org/wp-content/uploads/2014/03/2013AnnualReport.pdf>

Morton, A.B. & Symonds, H.K. (2002) Displacement of *Orcinus orca* (L.) by high amplitude sound in British Columbia, Canada. *Ices Journal of Marine Science*, 59:71–80.

National Marine Fisheries Service. 2008. Recovery Plan for Southern Resident Killer Whales (*Orcinus orca*). National Marine Fisheries Service, Northwest Region, Seattle, Washington.

Williams, R., C.W. Clark, D. Ponirakis, and E. Ashe. 2013. Acoustic quality of critical habitats for three threatened whale populations. *Animal Conservation*. 17(2):174-185.

WHALE AND
DOLPHIN
CONSERVATION





July 6, 2014

Jolie Harrison, Supervisor
Incidental Take Program
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

VIA E-MAIL: ITP.Laws@noaa.gov

RE: Proposed Incidental Harassment Authorization, Naval Base Kitsap-Bangor

Dear Jolie Harrison

I am submitting comments regarding the Navy's proposed wharf construction project in Hood Canal. The Navy's request for Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, for its second Explosives Handling Wharf should not be granted.

I have lived in the Puget Sound area since 1951. I have been closely connected with the Puget Sound environment, enjoying fishing, clamming, and boating for years in the area as well as in the Strait of Juan de Fuca and Washington coastal areas. I am also a long-time researcher and writer about military and environmental issues in the Puget Sound region.

Level B Harassment is defined as activity that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild.

Under section 101(a)(5)(D), NMFS may authorize such incidental taking by harassment only, for periods of not more than one year, pursuant to requirements and conditions contained within an IHA.

As in past years, the Navy proposes to continue this multi-year project within the approved in-water work window. This IHA would cover the third year (in-water work window) of the project, from July 16, 2014, through February 15, 2015.

The Navy's IHA discusses additional impacts to marine mammals other than caused by pile driving activity in the section, *Other Effects on Marine Mammals*.

However, the Navy has violated its own EIS and past IHAs by leaving equipment and hardware in the water outside the in-water work window, during the period from mid-February to mid-July. The Navy never addresses effects from its project outside of the approved in-water work window.

The Navy must either remove all construction equipment out of Hood Canal during the period outside the approved work window or assess the impact of this equipment in its application for an IHA.

Please see the attached photo from Google Earth. The photo was taken May 4, 2013, outside the approved work period. Please notice that there are two cranes and at least eight barges in the water at this time. Not only is this activity outside the Navy's application for the year, the Navy has not assessed the impact of this construction equipment.

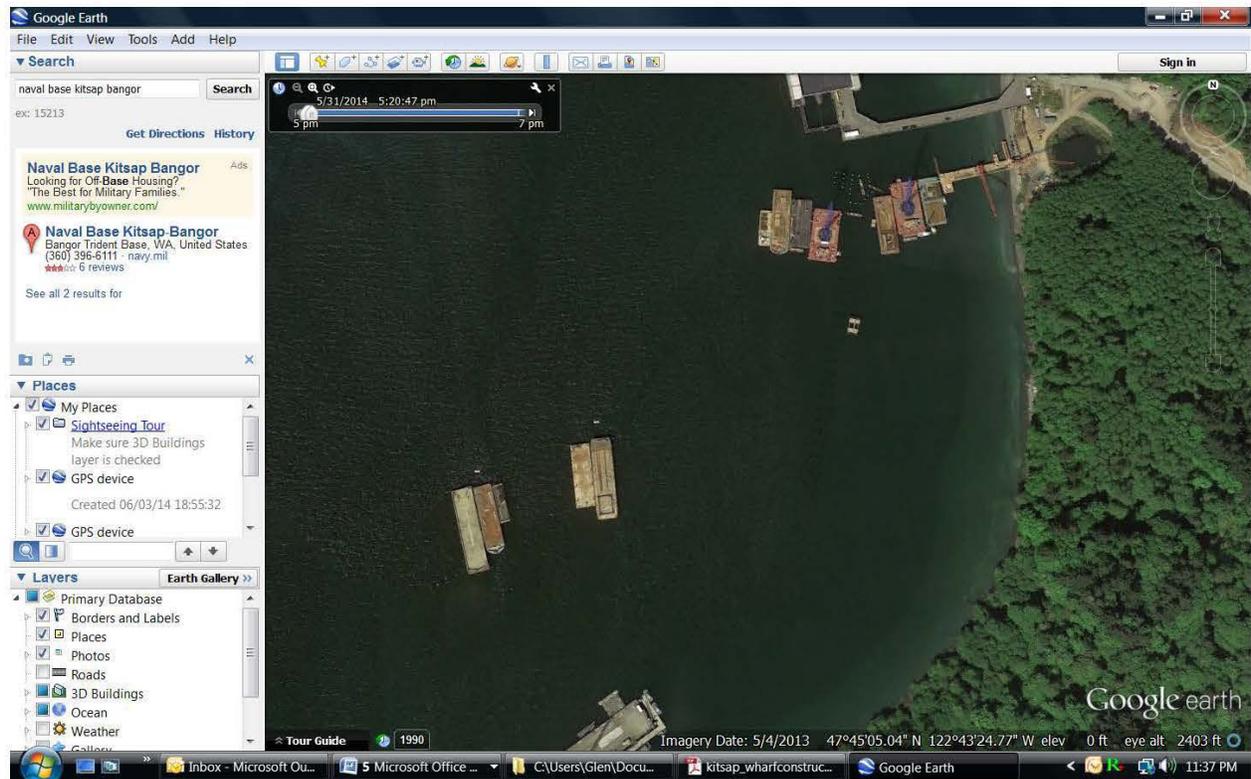
For these reasons, the IHA should be denied until the Navy has addressed this violation of the previous IHAs and its own EIS for the project.

I am requesting the opportunity to respond to any responses from the Navy to these issues before you make a decision on this IHA.

Please contact me if you have any questions about the statements I have presented. Thank you for your consideration of these issues.

Sincerely

A solid black rectangular redaction box covering the signature area.



June 18, 2014

TO: Jolie Harrison, Supervisor
Incidental Take Program, Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
Via email to: ITP.Laws@noaa.gov.

FR: [REDACTED]

RE: Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to a Wharf Construction Project; Notice (79 FR 32827, June 6, 2014)

I have reviewed the public notice that appeared in the *Federal Register* requesting comments on the U.S. Navy's (Navy) application to take marine mammals incidental to the construction of an explosives handling wharf (EHW- 2) in the Hood Canal at Naval Base Kitsap in Bangor, WA (NBKB).

The NMFS should deny take authorization for the following reasons:

a) Lack of Cumulative Impacts. The project involves impact and vibratory pile driving. As the Federal Register Notice notes, the use of both vibratory and impact pile driving is expected to produce underwater sound at levels that have the potential to result in behavioral harassment of marine mammals. The Navy is already proposing a separate action to conduct training and testing activities primarily within existing range complexes, operating areas, testing ranges and select Navy pierside locations in the Pacific Northwest. The Proposed Action includes pierside sonar testing conducted as part of overhaul, modernization, maintenance and repair activities at Puget Sound Naval Shipyard in Bremerton, Naval Base Kitsap at Bangor and Naval Station Everett.

See: <http://nwtteis.com/TheNavysProposedAction.aspx>

NMFS has failed to analyze the cumulative impacts of the Navy's sonar and noise producing activities at Naval Base Kitsap.

b) Lack of Disclosure of Project Impacts. The proposed construct project is an explosives handling wharf (EHW-2) in the Hood Canal at Naval Base Kitsap in Bangor, WA

(NBKB). An explosives handling wharf, by definition involves the handling of explosives. An accident, or terrorist activity, at this location resulting in an explosion could result in the actual “take,” (i.e., deaths) of marine mammals in the area. NMFS and the Navy should disclose the amount of marine mammal “take,” (i.e., deaths or injuries) that could result from an explosion at the handling wharf.

- c) The Navy is not a “citizen” under the Marine Mammal Protection Act (MMPA). The MMPA provides:

16 U.S.C. 1371(a)(5)(A)

(i) Upon request therefor by citizens of the United States who engage in a specified activity (other than commercial fishing) within a specified geographical region, the Secretary shall allow, during periods of not more than five consecutive years each, the incidental, but not intentional, taking by citizens while engaging in that activity within that region of small numbers of marine mammals of a species or population stock if the Secretary, after notice (in the Federal Register and in newspapers of general circulation, and through appropriate electronic media, in the coastal areas that may be affected by such activity) and opportunity for public comment—

...

(D)

(i) Upon request therefor by citizens of the United States who engage in a specified activity (other than commercial fishing) within a specific geographic region, the Secretary shall authorize, for periods of not more than 1 year, subject to such conditions as the Secretary may specify, the incidental, but not intentional, taking by harassment of small numbers of marine mammals of a species or population stock by such citizens while engaging in that activity within that region if the Secretary finds that such harassment during each period concerned—

As the Federal Register Notice and Application clearly state, NMFS has received a request from the U.S. Navy (Navy) for authorization to take marine mammals incidental to construction activities as part of a wharf construction project. The MMPA does not define “citizen.” A citizen is “a native or naturalized member of a state or nation who owes allegiance to its government and is entitled to its protection.” <http://dictionary.reference.com/browse/citizen> Because the Navy is not a “citizen,” the NMFS may not authorize the taking of marine mammals for this project.

Please send me a copy of your final decision on this matter. Thank you.



MARINE MAMMAL COMMISSION

23 June 2014

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

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Navy's application seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act (the MMPA) to take marine mammals by harassment. The taking would be incidental to pile driving and removal in association with a wharf construction project in Hood Canal at Naval Base Kitsap in Bangor, Washington. The authorization would be in effect from 16 July 2014 to 15 July 2015. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 6 June 2014 notice (79 Fed. Reg. 32828) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions. The Commission has commented on previous incidental harassment authorizations for pile driving and removal at Naval Base Kitsap.

BACKGROUND

The Navy plans to install and remove piles during construction of the new explosive handling wharf-2 (EHW-2) at Naval Base Kitsap. The project began two years ago and will continue for at least the next year. The requested incidental harassment authorization would be valid for one year and the Navy will seek renewal for an additional year, if needed. During the project, the Navy would install 1,250 permanent steel piles ranging in size from 24 to 48 inches in diameter. The Navy also would install and then remove up to 150 18- to 24-in temporary falsework steel piles. The Navy could use up to three vibratory hammers and one impact hammer to install and/or remove piles simultaneously. It expects pile installation and removal to take 195 days (weather permitting) between 16 July 2014 and 15 February 2015. It would limit activities to daylight hours only.

NMFS preliminarily has determined that, at most, the proposed activities would temporarily modify the behavior of small numbers of harbor seals, California sea lions, Steller sea lions, harbor porpoises, and transient killer whales. It also anticipates that any impact on the affected species and stocks would be negligible. NMFS does not anticipate any take of marine mammals by death or serious injury and believes that the potential for temporary or permanent hearing impairment would be at the least practicable level because of the proposed mitigation and monitoring measures. Those measures include—

- (1) restricting in-water activities after 16 February¹;
- (2) installing and removing piles using a vibratory hammer during the period between sunrise and sunset;
- (3) installing piles using an impact hammer during the period between two hours after sunrise to two hours before sunset from 16 July through 15 September² and between sunrise and sunset from 16 September through 15 February;
- (4) using an underwater sound attenuation device (e.g., bubble curtain or other sound attenuation device) for impact pile driving and conducting a performance test prior to its use;
- (5) using soft-start, delay, and shut-down procedures;
- (6) using qualified protected species observers to monitor the harassment zones for 15 minutes before, during, and for 15 minutes after pile driving and removal;
- (7) ceasing other heavy machinery work (i.e., activities other than pile driving and removal) if any marine mammal comes within 10 m of the vessel or equipment;
- (8) reporting any pinniped hauled out at unusual sites (e.g., in work boats) immediately to the local stranding network, and as soon as time allows to NMFS, and following any procedures or measures stipulated by the stranding network;
- (9) reporting injured and dead marine mammals to the regional stranding network and NMFS using NMFS's phased reporting approach and suspending activities, if appropriate; and
- (10) submitting draft and final monitoring reports to NMFS.

RATIONALE

Harbor seal density estimates

The Commission has made previous recommendations regarding the manner in which the Navy has estimated its harbor seal densities, which in general have been underestimated. In previous incidental harassment authorizations, the Navy used 1.31 animals per km² as the harbor seal density estimate³. NMFS indicated in previous *Federal Register* notices that the 1.31 density estimate (reduced by the proportion of seals hauled out at any given time) was corroborated by results of the Navy's vessel-based marine mammal surveys at Naval Base Kitsap in 2008 and 2009–10, in which an average of five individual harbor seals per survey were observed in the 3.9 km² survey area equating to 1.3 animals per km² (Tannenbaum et al. 2009, 2011). The Tannenbaum et al. (2009, 2011) data are absent from the proposed incidental authorization for this year's activities.

Rather, NMFS included justification in the *Federal Register* notice for the corrected density of 1.06 animals per km² based on the lack of dedicated harbor seal haul-out sites in the immediate area and on the supposition that only those animals embarking on foraging trips and entering the project area would be exposed. The Commission does note that harbor seals have been observed by the Navy to haul out on the floating security fence, floating booms, and more recently on overwater structures under the piers and in workboats within the immediate project area. Furthermore,

¹ Primarily to protect juvenile salmon.

² Primarily to protect breeding marbled murrelets.

³ The density estimate from previous incidental harassment authorizations was based on a lesser overall area of Hood Canal, specifically 291 rather than 358 km².

irrespective of the proximity of dedicated haul-out sites, seals have been observed in large numbers over the years in the project area (Tannenbaum et al. 2009, Tannenbaum et al. 2011, HDR 2012a, HDR 2012b, Department of the Navy 2014), and any seals observed swimming in the area, foraging or not—would be exposed to the pile driving activities. In addition, NMFS indicated in the *Federal Register* notice that harbor seals are relatively concentrated near areas of interest including haul-out sites in Dabob Bay and foraging areas. NMFS also indicated that past monitoring efforts have confirmed that harbor seals are less abundant in the deeper waters of Hood Canal, which generally is where harbor porpoises are observed. However, data from Tannenbaum et al. (2011) and HDR (2012a, b) indicate that harbor seals are found in deeper waters of Hood Canal and their distribution overlaps with that of harbor porpoises. Harbor porpoise sightings occur in the same areas as harbor seals, and, in fact, observations of harbor seals are actually more numerous in those areas.

In the proposed incidental harassment authorization, the Navy again decreased the estimated harbor seal density in Hood Canal by the proportion of seals expected to be hauled out at a given time, effectively decreasing the estimate from 3.04 to 1.06⁴ animals per km². That reduced value may provide a reasonable estimate of the number of seals in the water at any given instant, but it is not appropriate when the Navy is using an area x density method to determine the number of seals taken on any given day. The proposed activities would be conducted using up to four hammers for 7 to 15 hours per day. Based on past monitoring reports, pile driving has occurred for an average of 7 hours per day at any time during the day, including during tidal stages when harbor seals are more likely to be in the water. Given that information, virtually all of the harbor seals in the project area could be in the water at some time when sound-producing activities are being conducted and could be taken on a daily basis. Therefore, the Navy's estimate of the total number of seals that could be taken during the course of a day likely is a fraction of the number of seals that actually could be affected.

In addition, the Navy assumed that 35 percent of the harbor seals are in the water at any given time, equating to a haul-out correction factor of 1.53⁵ (Huber et al. 2001, Jeffries et al. 2003⁶)—a combined correction factor for both coastal and inland waters of Washington. Huber et al. (2001) also determined an inland correction factor of 1.57, which may be more applicable to Hood Canal. NMFS indicated in the *Federal Register* notice that there was no significant difference between the combined and inland haul-out correction factors and further stated that there were no existing data indicating that the proportion of individuals entering the water within the predicted area of effect during pile driving would be dramatically greater than 35 percent. The Commission does not agree. London et al. (2012) recently determined haul-out correction factors within Hood Canal that ranged from 1.10 to 1.32⁷. The proportion of seals in the water based on London et al. (2012) ranged from 0.76 to 0.91, a much greater proportion than used by the Navy and subsequently NMFS. The London et al. (2012) data not only are more recent than those from Huber et al. (2001) and Jeffries et al. (2003) but also directly applicable to Hood Canal, and thus should be considered the best available science. Moreover, the *Federal Register* notice indicated that 86 percent of the seals that were observed during surveys of Naval Base Kitsap from 2007–8 were observed swimming⁸,

⁴ Based on the Hood Canal area of 358 km².

⁵ Haul-out correction factors are based on the reciprocal of the proportion of seals hauled out. In this instance, 65 percent of the seals would be hauled out at a given time.

⁶ Neither of the studies occurred in Hood Canal.

⁷ Based on data collected at 12 noon.

⁸ Presumably those data originated from Tannenbaum et al. (2009).

which also is significantly greater than 35 percent. Accordingly, the Commission recommends that NMFS require the Navy to re-estimate the number of harbor seal takes using the density estimate⁹ adjusted by a haul-out correction factor from London et al. (2012). Even if that correction factor is used, the Commission does not support the Navy and NMFS reducing any density estimate by the proportion of animals in the water at a given instant when using an area x density method. Such a reduction only is applicable to methods or models that incorporate a time element and animal simulation, which the Navy has not used for the proposed incidental harassment authorization. If NMFS continues to believe the Navy's harbor seal density estimate should be reduced further based on the proportion of seals in the water at any given time, the Commission recommends that NMFS require the Navy to apply the percentage of time seals are in the water from London et al. (2012) rather than Huber et al. (2001) or Jeffries et al. (2003).

Mitigation and monitoring measures

Monitoring the impacts of the proposed activity is a basic requirement of any incidental harassment authorization. The Navy's monitoring strategy should be sufficient to determine accurately the numbers of animals taken during the activities and to observe and document any changes in marine mammal behavior as a function of distance from the activities. The Navy has indicated that it intends to use observers to monitor the disturbance zone (with a radius of up to 13.8 km for vibratory pile driving). Neither the Navy nor NMFS specified the number of observers that would be monitoring at a given time or the location(s) of those observers. The draft monitoring report from the previous incidental harassment authorization indicated the observers used the Level B harassment zone of 464 m for impact pile driving as a guideline during vibratory pile-driving activities (Department of the Navy 2014). That observed area generally was confined to the waterfront restricted area. Since only a subset of the total area¹⁰ was consistently monitored (464-m radius from the pile or 0.68 km² as outlined in the Navy's monitoring plan), the Navy extrapolated the numbers of marine mammals taken in the remaining 98 percent of the Level B harassment zone (Department of the Navy 2014). While, the Commission understands that the total ensounded area is a large area to monitor, it does not believe that the Navy conducted its due diligence by monitoring less than 2 percent of that area. Furthermore, the Navy indicated that no harbor porpoises were observed during the monitoring period (EHW-2 year 2; 2013-14)¹¹, because no boat was present in the main channel of Hood Canal to conduct surveys beyond the waterfront restricted area (Department of the Navy 2014). The Navy contractors recommended in the draft monitoring report that marine mammal observers be placed outside the waterfront restricted area to observe harbor porpoise or other cetacean baseline behaviors and any changes in those behaviors during the proposed activities.

In the past, the Navy has used both land- and vessel-based observers. The Commission recommended last year that NMFS require the Navy to monitor the extent of the Level B harassment zone using additional shore- or vessel-based observers beyond the waterfront restricted area to (1) determine the numbers of marine mammals taken during pile-driving and -removal

⁹ 711 harbor seals within 358 km².

¹⁰ The Navy indicated in its draft monitoring report that the total area was 34.5 km², however, the *Federal Register* notice and previous notices indicated that area to be 41.4 km². The Commission understands that the Navy is correcting that error for the final monitoring report.

¹¹ Harbor porpoises had been observed during previous monitoring efforts at Naval Base Kitsap.

activities and (2) characterize the effects on those mammals. The Commission believed that the addition of observers beyond the immediate construction site area also would be useful in estimating the taking of more cryptic species (i.e., harbor porpoise) that avoid the immediate area of the construction site but occur within the larger Level B harassment zone for vibratory pile driving. NMFS indicated that it had developed, in consultation with the Navy, a strategy that is appropriate to accomplish the stated objectives of the Commission's recommendation and that the Navy had designed a comprehensive, multi-year approach for its monitoring strategy. Accordingly, NMFS did not require additional shore- or vessel-based observers beyond the waterfront restricted area. Apparently, based on the draft monitoring report referenced herein, the Navy's strategy was not sufficient either to monitor for pinnipeds beyond the Level B harassment zone for impact pile driving or more importantly to monitor for cetaceans in general. The Commission has continued concerns regarding the Navy's monitoring strategy and again believes that the Navy could position observers on elevated platforms at the construction site, along the Hood Canal shoreline, or on watercraft throughout the Canal. Therefore, the Marine Mammal Commission recommends that NMFS require the Navy to monitor the extent of the Level B harassment zone for vibratory pile driving and removal using additional platform-, shore-, or vessel-based observers beyond the waterfront restricted area to (1) determine the numbers of marine mammals taken during pile-driving and -removal activities and (2) characterize the effects on those mammals, including cetaceans.

Because the Navy only estimated the numbers of marine mammals, namely pinnipeds, taken within less than 2 percent of the Level B harassment zone, it extrapolated its takes for the remaining 98 percent of the zone¹². For example, the Navy estimated that it had harassed up to 4,761 harbor seals¹³ during 133 days of vibratory pile driving based on its density estimate for the remaining 98 percent of the zone. Extrapolating the actual number of seals observed to be taken to the extent of the harassment zone (which is a method action proponents generally use to estimate the total numbers of animals taken), more than 18,000 harbor seals could have been harassed¹⁴. The Commission does not assert that the Navy actually harassed up to 18,000 harbor seals, but it does believe that extrapolating takes based on the flawed density estimate for nearly 98 percent of the area will certainly produce an underestimate.

Furthermore, estimating the numbers of cetaceans, specifically killer whales, taken based on a density estimate rather than observed sightings likely produced an overestimate of the number of killer whales taken. If killer whales had been present in Hood Canal or near Naval Base Kitsap, the Navy and the public likely would have been aware of it. These issues further support the Commission's view that the Navy should use additional observers to estimate more accurately the numbers of marine mammals taken during pile-driving and -removal activities. If the Navy uses an extrapolation method to estimate the numbers of animals taken for the upcoming incidental harassment authorization, it should be basing that calculation on the numbers of marine mammals

¹² The Commission understands that the Navy plans to amend its monitoring report to include takes for the full 41.4 km², in which case the Navy monitored an even lesser percentage of the total Level B harassment zone than indicated in the draft monitoring report.

¹³ The Navy used 1.06 rather than 1.31 animals/km² and 33.8 rather than 40.72 km² as the basis for that calculation, which would have resulted in 7,095 seals not 4,761. The Commission understands that the Navy will be correcting those errors in the final monitoring report.

¹⁴ Based on 365 harbor seals taken within 2 percent of the Level B harassment zone for vibratory pile driving—those 365 seals could represent the number of individuals or number of instances an individual was taken.

Ms. Jolie Harrison
23 June 2014
Page 6

observed beyond the waterfront restricted area. Accordingly, the Commission recommends that NMFS require the Navy to use better methods to estimate the numbers of marine mammals taken rather than the extrapolation method recently used for EHW-2 activities—the Commission would be willing to work with NMFS on this matter.

For the second year, NMFS would not require soft-start procedures to be implemented for vibratory pile driving and removal. The *Federal Register* notice indicated that soft-start procedures during previous vibratory pile-driving activities at Naval Base Kitsap led to equipment failure and serious human safety concerns. The Commission would not suggest implementing mitigation measures that endanger human lives. However, the Commission noted in its 2013 letter regarding the activities at Naval Base Kitsap that multiple operators (specifically Washington Department of Transportation and California Department of Transportation) implement soft-start procedures during vibratory pile driving and removal and have not reported such incidents. Further, the Commission recommended that, prior to eliminating the Navy's requirement to implement those measures, NMFS require the Navy to consult with the Washington Department of Transportation and/or the California Department of Transportation to determine if soft-start procedures can be used safely with the vibratory hammers used by the Navy. NMFS agreed to consult with the relevant entities and is still working to facilitate such a discussion.

Nevertheless, NMFS also determined that vibratory soft-start procedures would not be required for the proposed incidental harassment authorization and the remainder of the EHW-2 project (i.e., for any subsequent future EHW-2 activities). The Commission is concerned that NMFS made that determination without the discussion amongst relevant parties having occurred. Moreover, NMFS indicated that vibratory soft-start procedures are unnecessary to provide the means of effecting the least practicable impact on marine mammals. The Commission interprets that to mean the mitigation measure is not effective for minimizing impacts because the Level A harassment zones are so small. The Commission is unsure if NMFS plans to cease requiring soft-start procedures for all vibratory pile-driving activities or a portion of them on a case-by-case basis. Removing the requirement for implementing soft-start procedures may be advisable in some cases, but may not be advisable in other cases involving larger piles (e.g., greater than 48-in in diameter) and hence larger Level A harassment zones.

The Commission appreciates the opportunity to provide comments on the Navy's application. Please feel free to contact me should you have questions regarding the Commission's recommendations and comments.

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

References

- Department of the Navy. 2014. Naval Base Kitsap at Bangor Explosive Handling Wharf 2, Bangor Washington: Draft year 2 marine mammal monitoring report. Prepared by Hart Crosver, Inc., for Naval Facilities Engineering Northwest, Silverdale, Washington. 50 pages.
- HDR. 2012a. Naval Base Kitsap at Bangor EHW-1 pile replacement project: Final marine mammal monitoring report. Prepared by HDR, Inc., for Naval Facilities Engineering Command Northwest, Silverdale, Washington. 142 pages.
- HDR. 2012b. Naval Base Kitsap at Bangor test pile program: final marine mammal monitoring report. Prepared by HDR, Inc., for Naval Facilities Engineering Northwest, Silverdale, Washington. 230 pages.
- Huber, H. R., S.J. Jeffries, R.F. Brown, R.L. DeLong, and G. VanBlaricom. 2001. Correcting aerial survey counts of harbor seals (*Phoca vitulina richardsi*) in Washington and Oregon. *Marine Mammal Science* 17(2):276–293.
- Jeffries, S., H. Huber, J. Calambokidis, and J. Laake. 2003. Trends and status of harbor seals in Washington State: 1978-1999. *The Journal of Wildlife Management* 67(1): 208–219.
- London, J.M., J.M. Ver Hoef, S.J. Jeffries, M.M. Lance, and P.L. Boveng. 2012. Haul-out behavior of harbor Sseals (*Phoca vitulina*) in Hood Canal, Washington. *PLoS ONE* 7(6): e38180. doi:10.1371/journal.pone.0038180.
- Tannenbaum, B.R., M. Bhuthimethee, L. Delwiche, G. Vadera, and J.M. Wallin. 2009. Naval Base Kitsap, Bangor 2008 Marine Mammal Survey Report. Prepared by Science Applications International Corporation for BAE Systems Applied Technologies, Inc., Rockville, MD. 28 pages.
- Tannenbaum, B.R., W. Hafner, J. Wallin, L. Delwiche, and G. Vadera. 2011. Naval Base Kitsap, Bangor 2009–2010 Marine Mammal Survey Report. Prepared by Science Applications International Corporation for Naval Facilities Engineering Northwest, Silverdale, Washington. 38 pages.