July 17, 2020

Jolie Harrison, Chief
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National Marine Fisheries Service
1315 East-West Highway
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Comments submitted electronically

Re: Taking Marine Mammals Incidental to the U.S. Navy Training and Testing Activities in the Northwest Training and Testing Study Area, NOAA-NMFS-2020-0055

Dear Jolie Harrison,

Thank you for the opportunity to comment on the proposed rule for *Taking Marine Mammals Incidental to the U.S. Navy Training and Testing Activities in the Northwest Training and Testing Study Area.* The 29 undersigned organizations are deeply concerned about the proposal to approve high levels of harassment of the Southern Resident orcas, which are at serious risk of extinction.

Potential impacts from Naval activities are recognized as a threat to Southern Resident orca survival and recovery in both the U.S. and Canadian Southern Resident orca recovery plans.[1] In the Northwest Training and Testing (NWTT) area, the Navy plans to increase the frequency of several activities, including warfare testing and at-sea and pierside sonar testing, including within Southern Resident orca critical habitat and other places where they are commonly observed. **We urge the National Marine Fisheries Service (NMFS) to change its preliminary determination of "negligible impact" and require additional mitigation measures to significantly reduce the incidental take of Southern Resident orcas so that it does in fact warrant a "negligible impact" determination.**

Governor Inslee, the Washington State Attorney General, the Washington Department of Fish and Wildlife, the Puget Sound Partnership, Seattle Mayor Jenny Durkan, and more than 20 non-governmental organizations submitted formal comments to the Navy and NMFS in 2019 to express concerns and recommend measures to mitigate potential impacts related to sound, emerging technologies and spatial and temporal overlaps between Navy activities and orca populations.[2] The Navy's amended Letter of Authorization (LOA) application, filed later that year, did not add any additional mitigation measures—even though it dramatically increased the number of incidental takes of Southern Resident orcas from 2 to 51 per year. NFMS accepted this increase without any additional mitigation measures.

1. **Given the small size of the endangered Southern Resident orca population today, and the fact that they travel in groups, harm to a single individual orca can easily mean a population-level effect. Harm to 51 endangered orcas, or 68% of the population, will certainly mean a population-level effect.**

The amended Navy application and NMFS's proposed rule would allow for *51 instances of level B harassment against Southern Resident orcas every year* (3 from training activities and 48 from testing activities) for the next seven years.[3] The Navy's original application showed two orcas affected by training activities and zero from testing activities, but used old Southern Resident offshore density data. With the new density data from Hanson et al. 2018, the estimated impact in the amended application dramatically increased, but the Navy did not add any more mitigation measures. And yet the Navy and NMFS agree that this still constitutes a "negligible impact."

NMFS can authorize the incidental take of marine mammals under the Marine Mammal Protection Act if it finds that the taking would be of small numbers and have no more than a "negligible impact," which is defined as one that "cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival." The taking of Southern Resident orcas, acknowledged to be at 68%[4] of the population,

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[1] Fisheries and Oceans Canada. 2018. Amended Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada. Species at Risk Act Recovery Strategy Series, Fisheries & Oceans Canada, Ottawa, ix + 83 pp; National Marine Fisheries Service 2008. Recovery Plan for Southern Resident Killer Whales (Orcinus orca). National Marine Fisheries Service, Northwest Region, Seattle, Washington.

[2] Governor's Orca Task Force Final Report and Recommendations 2019: https://www.governor.wa.gov/sites/default/files/OrcaTaskForce_FinalReportandRecommendations_11.07.19.pdf

[3] Proposed rule, Table 32 and Table 33.

[4] Proposed rules in the Federal Register, page 34032.

cannot be argued to be "of small numbers." As noted in the proposed rule, "the higher the number of takes as compared to the population abundance, the more repeated takes of individuals are likely, and the higher the actual percentage of individuals in the population that are likely taken at least once in a year."

This number of takes of Southern Resident orcas also does not constitute a "negligible impact." The key factor is the significance of the level of impact on rates of recruitment or survival. Level B harassment means disruption of natural behavior patterns such as feeding, surfacing, nursing, breeding, sheltering or migration to the point where those patterns are abandoned or significantly altered. These are all critical activities for the Southern Resident orcas now, given that they have produced only two surviving calves in the last four years and nutritional stress is recognized as a primary threat to the population. Up to 69% of all detectable pregnancies between 2008 and 2014 were unsuccessful, and low availability of Chinook salmon appeared to be a significant cause of late pregnancy failure;[5] Level B harassment by Navy activities that interferes with both feeding and breeding or displaces orcas from preferred foraging areas is of significant concern and is likely to further contribute to the Southern Resident orcas' low reproductive success, and therefore their rate of recruitment.

While an estimate of the number of takes alone "is not enough information on which to base an impact determination," NMFS is required to assess it in the context of population status. In 2016, NMFS declared that Southern Resident orcas are one of the marine species most at risk of extinction nationwide. The population has continued to decline since the 2015 NWTT EIS. Each individual orca in the current population matters if the population is to avoid extinction. The final rule will need to be updated with the latest number of Southern Resident orcas alive today, which is currently even fewer than the 75 stated in the proposal.

Furthermore, NMFS should be analyzing the cumulative impacts over the seven years of the authorization. The Navy has asked for approval for 243 instances of Level B harassment against Southern Resident orcas from training and testing over the seven-year period. Southern Resident orcas are long-lived animals, and it is likely that the same animals will be affected in multiple years—during this seven-year period and likely beyond. This kind of ongoing, perpetual take to individuals in a small, endangered population is a real threat and should be more clearly factored into the analysis of impact.

2. The Navy and NMFS failed to incorporate reasonable additional mitigation measures.

Even where NMFS can reach a negligible impact finding, "the agency must still prescribe measures that will affect the least practicable amount of adverse impact upon the affected species or stock."[6]

In comments on the LOA application and the draft Environmental Impact Statement, many organizations and Washington state agencies asked for enhanced mitigation measures to reduce adverse impacts on the Southern Residents. These measures are not expected to impact the Navy's

[5] Wasser et al. 2017.
[6] Proposed rules in the Federal Register, page 33988.

ability to carry out its national security mission, and yet they do not seem to have been considered, let alone adopted.

Furthermore, mitigation measures considered sufficient when the Navy thought the density of Southern Resident orcas offshore was much lower should not be considered sufficient now that the Navy knows it is higher based on more recent data.

We therefore strongly urge NMFS to require additional mitigation measures, such as:

- **The Navy should use whale report alert systems for real-time sightings and advance warnings in the inland waters, particularly considering the limited visual range of lookouts.** According to the Navy's own estimates, mid-frequency sonar can impact the orcas beyond 16km from the source.[7] This is well outside the reasonable area that marine mammal observers are able to survey to record marine mammal sightings and initiate mitigation measures. Newly available apps and technology provide real-time information on whale presence in the Salish Sea and along the coast. Using this technology could expand the ability of the Navy's marine mammal observers to be aware of and respond to the presence of Southern Resident orcas. For example, the Whale Report Alert System (WRAS), developed by the British Columbia Cetacean Sightings Network, alerts mariners to the presence of whales so that mitigation measures may be enacted to reduce the risk of disturbance and collision. Discussions are underway to potentially expand this system to Washington waters. Orca Network, Whale Scout and other organizations in Washington also contribute to a Whale Sighting Network with close to real-time reporting in the Salish Sea. This measure is indisputably both available and practical, per the factors that NMFS considers in its evaluation.

- **The Navy should also use passive acoustic monitoring to detect Southern Resident orcas and other marine mammals when doing active sonar training and testing.** This will further expand awareness beyond what can be accomplished with visual lookouts. The Navy proposes to use passive acoustic monitoring to look for marine mammals when undertaking certain other activities (e.g., explosive torpedoes), where passive acoustic assets are already part of an activity, but it does not include it as a mitigation measure for active sonar testing, which has the greatest anticipated impact on Southern Resident orcas.

- **The Navy should fund the installation of an array of underwater microphones along the coast of Washington state to provide near real-time information on the whereabouts of the Southern Resident orcas as well as other cetaceans.** This would serve as an important early warning system in the offshore area to complement the boat-based observers who have a limited visual range. Activities could then be planned based on Southern Resident movements and halted when Southern Residents are approaching well before they reach the 0.5 nautical mile distance. Hanson 2018 noted that 28 recorders would achieve a high probability of detection all along the Washington coast.[8] The array would

[7] DSEIS, Table 3.4-13, p. 3.4-150.

[8] Hanson, M.B., E.J. Ward, C.K. Emmons, and M.M. Holt. 2018. Modeling the occurrence of endangered killer whales near a U.S. Navy Training Range in Washington State using satellite-tag locations to improve acoustic detection data.

have the added benefit of improving monitoring of other killer whale populations, pilot whales, sperm whales, and beaked whales, allowing for improved implementation of mitigation measures to reduce incidental take of those species as well.

- **The sonar shut-down mitigation zone must be expanded beyond the 200- or 100-yards in the proposed rule.**[9] At an absolute minimum, the Navy should cease active sonar exercises if an orca is sighted within 0.5 nautical miles. Behavioral disturbance from sonar noise occurs at much greater distances, and we urge NMFS to require a significantly larger shut-down mitigation zone, which would certainly be feasible with new alert systems as noted below. However, at a minimum, 0.5 nautical miles will not run counter to Washington state law, which requires vessels to slow down to 7 knots when within 0.5 nautical miles of a Southern Resident orca in order to mitigate noise impacts.

- **The Navy should clearly state that all appropriate personnel must have completed relevant training modules prior to participating in training and testing activities.** Ensuring "environmental awareness of event participants," including the possible presence of Southern Resident orcas in the training location, implies that it is real-time situational awareness of potential orca presence. But it is in fact a series of modules in the Afloat Environmental Compliance Training Program, and "appropriate personnel" will complete some or all of these modules at some time, with no defined timeline. There should be clear timeframes in which personnel will complete this training program. Like the use of real-time alert systems, this mitigation measure is indisputably both available and practical.

- **The Navy should provide NMFS with details on proposed timing of their training and testing activities and adjust the timing of their activities to minimize such overlap—such as through seasonal closures.** The DSEIS and the LOA application did not detail the times of year during which the proposed activities would take place. To issue a LOA, NMFS requires that proposed actions "be well-planned with enough detailed information to allow for a robust analysis of the entire duration of your planned activity," which is lacking here. The Southern Resident orcas have exhibited seasonality in their movements, and information from tagging studies, coastal surveys and passive acoustic monitoring allows some degree of understanding of seasonal areas for when and where they may be traveling and foraging. Any overlap in their seasonal movements and the Navy's testing and training activities will increase adverse impacts.

- **NFMS should require additional mitigation and monitoring in the orcas' offshore habitat.** This is necessary given the potential increased use of this area and the unique activities—such as active sonar—that take place in this portion of the NWTT range. It is even more critical now that the offshore density numbers have been updated and have dramatically increased the anticipated incidents of level B harassment affecting Southern Resident orcas. Approximately 92% of training impacts and 68% of testing impacts on killer

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[9] DEIS, Table 5.3-2: Procedural Mitigation for Active Sonar

whales are projected to occur in the offshore area.

3. **Other agencies and operators are taking new, meaningful steps to reduce noise and disturbance affecting Southern Resident orcas. The Navy must also increase its protections, or it will become responsible for a larger share of the cumulative impact and potentially negate some of the benefits of the other actions being taken.**

In 2019, Washington state took big steps to reduce impacts on Southern Resident orcas from other vessel types, recognizing that noise and disturbance have significant adverse consequences for this endangered population. In May of that year, Governor Inslee signed into law a bill that increases the distance that vessels must stay away from the Southern Residents and enacts a 7-knot speed limit within a half nautical mile of these orcas. The legislature also allocated funding for a new hybrid ferry and funding to convert some ferries to hybrid-electric power. Washington State Ferries also started conducting a baseline noise inventory and working to develop solutions to address noise and frequencies of concern.

In 2020, the Washington Department of Fish and Wildlife is developing rules for a commercial whale-watching license program to reduce the daily and cumulative impacts of vessel noise and disturbance on the Southern Residents. Meanwhile, in 2020, voluntary ship slowdowns will continue and expand through the Vancouver Fraser Port Authority-led Enhancing Cetacean Habitat and Observation (ECHO) Program – a Canadian program that directly benefits Southern Resident orcas in the inland waters. In 2019, 82% of large commercial ships participated in the slowdown.[10]

The Navy's contributions will take up a larger share of the underwater noise and disturbance as others reduce their impacts and the Navy continues to scale its activities up. The Navy should increase its own mitigation efforts so that there is still a significant net benefit to the Southern Residents in terms of reduced noise and disturbance when all these other entities are increasing their protective measures.

4. **Increasing the Navy's testing and training activities at this time is counter to what the endangered Southern Resident orcas need to have a chance at recovery.**

Without bold and immediate actions, the Southern Residents are likely to go extinct. Everything we can do now to protect the Southern Resident orcas is critical. Despite being listed under the Endangered Species Act for nearly 15 years, this unique population is not recovering and is continuing to decline. It is obvious that status quo actions, including the Navy's training and testing activities, are not serving the Southern Resident orcas. In a time when we should be acting to address and decrease threats facing the population, including reducing noise and disturbance, the Navy's proposed activities increase the risks from ocean noise, vessel strikes and disturbance, potential direct harm and injury to Southern Resident orcas, and displacement from preferred habitat.

[10] https://www.portvancouver.com/environment/water-land-wildlife/echo-program/projects/voluntary-vessel-slowdown-trial/

Given the Southern Resident orcas' highly endangered status and continuing decline, the Navy should adjust its training and testing activities to reduce impacts and increase protections for these iconic animals.

We urge NMFS to change its preliminary determination of "negligible impact" and require additional mitigation measures to significantly reduce the incidental take of Southern Resident orcas.

Sincerely,

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