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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

[Docket No. 250813-0139]

RIN 0648-BN42

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the Duckabush Estuary Restoration Project in Washington

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule, request for comments.

SUMMARY: NMFS has received a request from the U.S. Army Corps of Engineers (USACE) for incidental take regulations (ITR) and a Letter of Authorization (LOA) pursuant to the Marine Mammal Protection Act. The requested regulations would govern the authorization of take of small numbers of marine mammals over 5 years (2026-2031) incidental to the Duckabush Estuary Restoration Project (DERP) in Hood Canal, Washington. NMFS requests public comments and will consider them prior to making any final decision on the requested ITR and issuance of the LOA; agency responses to comments will be summarized in the final rule, if issued.

DATES: Comments and information must be received no later than [*insert date 30 days after date of publication in the FEDERAL REGISTER*].

ADDRESSES: A plain language summary of this proposed rule is available at: *https://www.regulations.gov/docket/NOAA-NMFS-2025-0636*.

- *Electronic Submissions*: Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to *https://www.regulations.gov* and enter NOAA-NMFS-

2025-0636 in the Search box (note: copying and pasting the FDMS Docket Number directly from this document may not yield search results). Click on the "Comment" icon, complete the required fields, and enter or attach your comments.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing at: *https://www.regulations.gov* without change. All personal identifying information (*e.g.*, name, address, *etc.*), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: Robert Pauline, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

A copy of the USACE's application and supporting documents, as well as a list of the references cited in this document, may be obtained online at: *https://www.fisheries.noaa.gov/action/incidental-take-authorization-us-army-corps-engineers-duckabush-estuary-restoration-project.* In case of problems accessing these documents, please call the contact listed above (see **FOR FURTHER INFORMATION CONTACT**).

Purpose and Need for Regulatory Action

This proposed rule, if adopted, would establish a framework under the authority of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 *et seq*.) to authorize, for a 5-year period (2026-2031), take of marine mammals incidental to the USACE's construction activities associated with the DERP. NMFS received an application (the

application) from the USACE requesting 5-year regulations and an LOA to take a single species of marine mammals. Take would occur by Level B harassment only incidental to construction activities. Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines "Level B harassment" as any act of pursuit, torment, or annoyance, which 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. Take by Level A harassment is not anticipated or proposed for authorization. Similarly, no mortality or serious injury is anticipated or proposed.

Legal Authority for the Proposed Action

The MMPA prohibits the "take" of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made, regulations are promulgated, and public notice and an opportunity for public comment are provided.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other "means of effecting the least practicable adverse impact" on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to as "mitigation"). The MMPA sets forth requirements pertaining to the mitigation, monitoring and reporting of the takings. The

definitions of all applicable MMPA statutory terms cited above are included in the discussion below.

Section 101(a)(5)(A) of the MMPA and the implementing regulations at 50 CFR part 216, subpart I provide the legal basis for proposing and, if appropriate, issuing 5-year regulations and an associated LOA. This proposed rule also establishes required mitigation, monitoring, and reporting requirements for the USACE's activities.

Summary of Major Provisions within the Proposed Rule

The following is a summary of the major provisions of this proposed rule regarding USACE construction activities. These provisions include measures requiring:

- Performance of construction work only during daylight hours when visual monitoring of marine mammals can be implemented;
- Gradually increasing time periods dedicated to construction activities each day throughout the day to reduce the risk of potentially startling marine mammals;
- Conducting 30 minutes of pre- and post-activity monitoring associated with pile installation or removal activities;
- Establishment and monitoring by protected species observers (PSOs) of a 300-meter observation zone for all construction activities;
- Halting construction activity: (1) if a marine mammal comes within 10 meters of operations of heavy equipment; or (2) a pup less than one week old comes within 20 meters of where heavy machinery is operating; and
- Not initiating construction activities within 300 meters of a mother-pup pair that is hauled out, or within 100 meters of a mother-pup pair in the water.

National Environmental Policy Act

To comply with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*) and NOAA Administrative Order (NAO) 216-6A, NMFS must evaluate the proposed action (*i.e.,* promulgation of regulations and subsequent issuance of

a 5-year LOA) and alternatives with respect to potential impacts on the human environment.

This action is consistent with categories of activities identified in Categorical Exclusion B4 (Incidental Harassment Authorizations (IHAs)) with no anticipated serious injury or mortality) of the Companion Manual for NAO 216-6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has preliminarily determined that issuance of the proposed rule qualifies to be categorically excluded from further NEPA review.

Information in the USACE's application and this document collectively provide the environmental information related to proposed issuance of these proposed regulations and subsequent incidental take authorization for public review and comment. We will review all comments submitted in response to this notice of proposed rulemaking prior to concluding our NEPA process and prior to making a final decision on the request for incidental take authorization.

Summary of Request

On April 17, 2024 NMFS received an application from the USACE requesting authorization for the take of marine mammals incidental to construction activities associated with the DERP in Washington. A revised application was submitted on September 27, 2024. We determined the application was adequate and complete on November 19, 2024. On November 25, 2024, we published a notice of receipt of the USACE's application in the **Federal Register**, requesting comments and information related to the request for 30 days (89 FR 92907). We received no public comments.

The USACE requests authorization to take harbor seal (*Phoca vitulina*), by Level B harassment only. The proposed regulations would be valid for 5 years (2026-2031).

Description of Proposed Activity

Overview

The USACE would be working with the Washington Department of Fish and Wildlife (WDFW) and the Washington State Department of Transportation (WSDOT) to implement an ecosystem restoration project on the Duckabush River Estuary in Hood Canal, WA. The project would reconnect floodplain and intertidal wetlands to improve tidal exchange, sediment transport, and estuary development. The DERP would restore tidal and riverine hydrology to 38 acres (15.38 hectares) of the Duckabush River delta, allowing for natural habitat-forming processes including sediment and detritus exchange, freshwater input, and tidal flushing. Restoration will provide rearing habitat for Hood Canal summer chum salmon by reconnecting 20 river miles (32 kilometers (km)) of nearly pristine upstream habitat with a now fully functional salt marsh and mudflat estuary. The USACE anticipates construction will take up to 880 workdays across 48 months to complete. Time estimates assume that construction would take place 8 hours per day, 5 days per week. At the project location, the freshwater in-water work window is July 16 - August 15 and the marine in-water work window is July 16 - January 15. However, with the exception of very limited in-water work, these dates are non-binding since the vast majority of construction work would be land-based with minimal or no impacts on marine mammals.

Dates and Duration

The proposed regulations would be valid for a period of 5 years from July 30, 2026 through July 29, 2031. In the Puget Sound region, wet weather begins about mid-October and continues until about May, although rainy periods could occur at any time of the year. The USACE would attempt to schedule earthwork construction during the drier months of June through September. During wet weather months, the groundwater levels

could increase, resulting in seepage into site excavations. Placing and compacting fill may not be practicable during wet weather.

Specific Geographic Region

The Duckabush River exists within a single channel encompassing a 76-square-mile (196.84 square kilometer) watershed near Brinnon, WA. The Duckabush River Estuary is a tidally influenced river delta that opens into Hood Canal on the south side of the Black Point Peninsula at approximately Mile 310 of Highway 101. The estuary consists of approximately 38 acres of salt marshes, eelgrass beds, and extensive mud and gravel flats that support productive shellfish beds. The project area is mostly undeveloped with single-family homes and forested habitat comprising boundaries to the north, south, and west while the Duckabush Estuary and Hood Canal form the eastern border.

The historical processes and functions of the Duckabush Estuary site differ from current conditions. By the early 1900s, road and bridge construction bisected the estuary. Washington State replaced these early roadways in 1934 with two bridges over the Duckabush River and Duckabush Slough as part of Highway 101. This highway cuts across the intertidal river delta and estuary wetland complex, spanning the main channel and a former distributary channel. The Highway 101 bridges disrupt tidal circulation and impede fish access to productive salt marsh and slough habitats. These hydrologic constrictions, along with fill within the estuary, caused decline in mudflats and salt marshes.

Figure 1. Project Site Including Likely Pile Driving Locations Relative to Harbor Seal Haulout Sites

Detailed Description of the Specified Activity

A new Highway 101 crossing of the Duckabush Estuary, known as the Highway 101 Bridge, would consist of an eight-span bridge, 1,613 feet (491.64 meters (m)) long and 34 feet (10.36 m) wide. Span lengths would range from about 175 feet (53.34 m) to 228 feet (69.49 m). The bridge would be supported by nine piers and founded on drilled

shaft foundations. On the Highway 101 Bridge, construction crews would first erect temporary work platforms so that all subsequent work will be isolated from the estuary surface. The construction of the new Petitjean Creek Bridge and realignments of Duckabush Road and Highway 101 bridge approaches would also occur during this timeframe. Work within the current Highway 101 footprint would only occur after the new bridge is open to traffic. The construction of the Highway 101 bridge may take up to 600 workdays to complete over the course of 27 months. The bridge would be built out of alignment with the current Highway 101, so any substructures and superstructures would be built simultaneously. Construction would progress from south to north. Construction of each section would begin with installing piers and their related superstructure components. This portion of construction would take 150 days to complete across the duration of the project. Piers would be installed into the ground by oscillators, vibratory hammers, augers, cranes, concrete mixing and pump trucks, and drill rigs.

A new bridge (Petitjean Creek Bridge) would be constructed. Since it falls within the current Highway 101 footprint, crews must take measures during construction to minimize the impacts on traffic. To accommodate through traffic during construction, crews would temporarily widen the road by about 5 feet (1.52 m). Bridge construction would occur in two phases. The first phase would consist of building the substructure and installing piers. In the second phase, crews would build the superstructure, including the girders, traffic barriers, and road surface. Pier installations for the Petitjean Creek Bridge would follow the same protocol as described previously for construction of the Highway 101 Bridge.

The realignment of Highway 101 bridge approaches and Duckabush Road would require subgrade improvement, likely involving the installation of aggregate piers. Construction of these piers may require an auger to dig a pilot hole, filling the pier location with crushed stone, and compacting this fill with a vibratory hammer. After

aggregate pier installations, standard road grading and surfacing would occur using front-end loaders, graders, pavers, and vibratory rollers.

The existing Highway 101 causeway would be demolished by a dozer or excavator with excavated material loaded on to dump trucks for off-site removal. The finished causeway demolition cross section would excavate 24 inches below the finished grade and replace this material with excavated channel material. The USACE would lower the causeway to the 8- to 9-foot (2.44 to 2.74 m) elevation range, which is within the normal high tide line and Mean Higher High Water (MHHW). The training berms upstream of the south bridge would be removed to an elevation of 10 feet (3.05 m). This would allow the Duckabush River to flow into that area.

The demolition of existing Highway 101 bridges would occur after the new bridge is fully operational as not to disrupt through traffic. Following construction sequencing, the north bridge would be demolished before the south bridge. For each bridge, the bridge decks would be removed first, followed by piles and foundations. Work would access from both sides of the bridges, using cranes, excavators, and concrete cutting tools. Vibratory hammers may be used to remove embedded piers during north bridge demolition. Some of these piers are located within the wetted river channel up to 10 feet (3.05 m) below the high tide line.

Wood piles removal typically uses a metal chain wrapped around the pile to pull it up and out with a crane or excavator. If piles cannot be removed in this manner, piles may be left intact 2-3 feet (0.61-0.91 m) below the streambed. If this is the case, divers with pneumatic chainsaws would cut the pile tops off at the appropriate level.

The USACE would need to excavate six channels under or near the new Highway 101 bridge to reconnect river delta distributary channels that were disconnected by the old Highway 101 causeway. Channels would be excavated from temporary work platforms when possible. Construction will utilize swamp mats and low-pressure

equipment when working from the platforms is not feasible. The existing WDFW parking lot located southwest of the new bridge would be enlarged and raised by 3 ft (.091 m) and two new pedestrian paths would also be built. Visual disturbance of seals from these areas is unlikely as these items are located west of Highway 101. Therefore, the newly constructed causeway and bridge span would interfere with any direct sight lines to the seal haulout areas. The USACE would install large wood structures, known as engineered logjams, placed along restored banks to provide near-term bank stability as the river re-establishes flow connections to restored channels and vegetation becomes re-established on banks. For engineered logjams, construction teams would augur four pilot holes for vertical anchor piles. They would then place piles using a crane and then embed to the final depth using an impact hammer, if necessary. These structures are unlikely to result in visual disturbance of seals since they are also located west of the new causeway and bridge span.

Proposed mitigation, monitoring, and reporting measures are described in detail later in this document (please see **Proposed Mitigation** and **Proposed Monitoring and Reporting**).

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history of the potentially affected species. NMFS fully considered all of this information, and we refer the reader to these descriptions, instead of reprinting the information. Additional information regarding population trends and threats may be found in NMFS' Stock Assessment Reports (SARs; *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments*) and more general information about these species (*e.g.*, physical and behavioral descriptions) may be found on NMFS' website (*https://www.fisheries.noaa.gov/find-species)*.

Table 1 lists all species or stocks for which take is expected and proposed to be authorized for this activity and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS' SARs). While no serious injury or mortality is anticipated or proposed to be authorized here, PBR and annual serious injury and mortality (M/SI) from anthropogenic sources are included here as gross indicators of the status of the species or stocks and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS' stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS' U.S. Pacific Marine Mammal SARs (Carretta *et al.* 2024). All values presented in table 1 are the most recent available at the time of publication (available online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments*).

Table 1 — Marine Mammal Species[1] Likely To Occur Near the Project Area That May Be Taken by USACE's Activities.

Common name	Scientific name	Stock	ESA/MMPA status; Strategic (Y/N)[2]	Stock abundance (CV, Nmin, most recent abundance survey)[3]	PBR	Annual M/SI[4]
Order Carnivora – Pinnipedia						
Family *Phocidae (*earless seals*)*						
Harbor Seal	*Phoca vitulina*	Washington Inland Hood Canal	-, -, N	3,363 (0.16, 2,940, 2019)[5]	88	2

[1] Information on the classification of marine mammal species can be found on the web page for The Society for Marine Mammalogy's Committee on Taxonomy at: *https://marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies*.

[2] ESA status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

[3] NMFS marine mammal SARs online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region*. CV is coefficient of variation; N_{min} is the minimum estimate of stock abundance.

[4] These values, found in NMFS's SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (*e.g.*, commercial fisheries, ship strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value or range.

[5] These values were presented in the 2023 Draft Marine Mammal SAR. However, the draft 2023 SAR for the Washington Inland Waters harbor seal stocks, including the Hood Canal stock was not finalized as part of the 2023 Final SAR (89 FR 104989, December 26, 2024) given that the Pearson *et al.* (2024) estimates of abundance and trends remain unpublished at the time of publication. This SAR will be revised in a subsequent cycle when the abundance estimates for these stocks are published. However, this remains the best available information for use in evaluating effects to this stock of harbor seals.

As indicated above in table 1, a single species (with one managed stock) temporally and spatially co-occurs with the activity to the degree that take is reasonably likely to occur. All species that could potentially occur in the proposed restoration and construction areas are included in table 4 of the IHA application. Harbor porpoise (*Phocoena phocoena*), Dall's porpoise (*Phocoenoides dalli dalli*), and transient killer whale (*Orcinus orca*) would not be affected by the proposed activities since there would be no impact to these marine mammals occurring in the marine waters of Hood Canal. California sea lion (*Zalophus califiornianus*) and Steller sea lion (*Eumetopias jubatus*), have been documented in Hood Canal, but are not expected to use any of the estuarine or upland haulout areas; therefore, these species are not expected to be affected by the proposed activities.

Harbor Seal

Harbor seals are the most common, widely distributed marine mammal found in Washington marine waters and are frequently observed in the nearshore marine environment. They occur year-round and breed in Washington. Numerous harbor seal haulouts occur in Washington inland waters and frequently occupy bays, estuaries, and inlets (Baird, 2001). Ideal harbor seal habitat includes haulout sites, shelter during the breeding periods, sufficient food, and harbor seals have displayed strong fidelity to haulout sites.

Harbor seals are the only resident marine mammal species in Hood Canal and utilize the Duckabush River estuary as one of the primary haulout sites in the Canal (London *et al*. 2012, Jeffries *et al*. 2000). Harbor seals typically haul out along the river channels and sloughs at the Duckabush River estuary. Harbor seal counts peak at the Duckabush River during the primary pupping season (August-October) and molting season (September-November) with seals spending more time in the water during colder winter and spring months (Jeffries *et al*. 2003, Jeffries *et al*. 2000). WDFW conducts regular aerial surveys of hauled-out harbor seals in Hood Canal, typically restricting monitoring to the peak of the pupping period and the window 2 hours before and after high tides to maximize the number of individuals observed on land.

The Hood Canal stock of harbor seals exhibit different haul out behaviors and timing of pupping and molting seasons compared to coastal and other Washington Inland Waters stocks as Hood Canal seals typically haul out during low tide when more beach or substrate area is exposed (Carretta *et al*. 2022). Hood Canal seals haul out at high tide along river channels and sloughs because those areas are not as accessible during low tides (London *et al*. 2012). Hood Canal has five main harbor seal haulout sites including the Duckabush River estuary (Jeffries *et al*. 2000, London *et al*. 2012). The population of the Hood Canal stock of harbor seals has been relatively stable for the over the past three decades (Pearson *et al*. 2024).

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

This section provides a discussion of the ways in which components of the specified activity may impact marine mammals and their habitat. The **Estimated Take of Marine Mammals** section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The **Negligible Impact Analysis and Determination** section considers the content of this section, the **Estimated Take of Marine Mammals** section, and the **Proposed Mitigation** section, to

draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and whether those impacts are reasonably expected to, or reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Visual and acoustic stimuli generated by the presence and operation of assorted DERP construction equipment (*e.g.*, auger, chainsaw, crane, impact pile driver, vibratory pile driver, concrete saw, dump truck, excavator, *etc*.), as well as the presence of personnel, has the potential to cause Level B harassment of pinnipeds in the DERP project area where harbor seal haulout sites have been identified (see figure 1). This section includes a summary and discussion of the ways that the types of stressors associated with the specified activity (*e.g.,* construction) have been observed to impact marine mammals. This discussion may also include reactions that we consider to rise to the level of a take and those that we do not consider to rise to the level of a take. This section provides background information on potential effects of these activities. For a discussion of the manner in which the mitigation measures will be implemented, and how the mitigation measures will shape the anticipated impacts from this specific activity, see the **Proposed Mitigation** section below.

Disturbance may result in reactions ranging from an animal simply becoming alert to the presence of machinery (*e.g.,* turning the head, assuming a more upright posture) to flushing from the haulout site into the water. NMFS does not consider the lesser reactions to constitute behavioral harassment, or Level B harassment takes, but rather assumes that pinnipeds that flee some distance or change the speed or direction of their movement in response to the presence of researchers are behaviorally harassed. Animals that respond to stimuli associated with the specified activity by becoming alert, but do not move or change the nature of locomotion as described, are not considered to have been subject to behavioral harassment.

Visual disturbance has the potential to directly affect harbor seals that haul out or otherwise utilize the environment near the project area. It is possible that seals flushed from haulout sites at Duckabush will move to other nearby haulout sites in Hood Canal, the closest of which are Dosewallips (3.5 miles (5.63 km) northeast), Quilcene Bay 7 miles (11.26 km) northeast), and Hamma Hamma (8.5 miles (13.68 km) southwest). Alternatively, harbor seals may also habituate to consistently elevated sound levels or visual disturbances and flush from haulout sites less often due to in-air noise disturbances (Bankhead *et al*. 2023).

There are few studies that have examined the influence of visual disturbance on the haulout behavior of harbor seals and we are aware of none that specifically investigate impacts from land-based construction operations. Reactions to visual disturbance, if any, have been documented and are dependent on species, state of maturity, experience, current activity, reproductive state, time of day, and many other factors (Richardson *et al.,* 1995; Southall *et al.,* 2007; Weilgart 2007). These behavioral reactions from marine mammals are often shown as: Changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities (such as socializing or feeding); visible startle responses or aggressive behavior; avoidance of areas; and/or flight responses (*e.g.,* pinnipeds flushing into the water from haulouts or rookeries). If a marine mammal does react briefly to a disturbance by changing its behavior or moving a small distance, the impacts of the change are unlikely to be significant to the individual, let alone the stock or population. However, if visual stimuli displaces marine mammals from an important feeding or breeding area for a prolonged period, impacts on individuals and populations could be significant (*e.g.,* Lusseau and Bejder 2007; Weilgart, 2007). Numerous studies have shown that human activity can flush harbor seals off haulout sites (Calambokidis *et al.,* 1991; Suryan and

Harvey, 1999). The Hawaiian monk seal (*Neomonachus schauinslandi*) has been shown to avoid beaches that have been disturbed often by humans (Kenyon 1972). In one case, human disturbance appeared to cause Steller sea lions to desert a breeding area at Northeast Point on St. Paul Island, Alaska (Kenyon 1962).

Scientists have documented that pinnipeds exhibit altered behavior such as increased swimming speed, erratic movement, and active avoidance behavior (Acevedo, 1991; Trites and Bain, 2000), disruption of normal social behaviors (Lusseau 2003; 2006), and the shift of behavioral activities that may increase energetic costs (Constantine *et al.,* 2003).

Henry and Hammil (2001) conducted a study to measure the impacts of small boats (*i.e.,* kayaks, canoes, motorboats and sailboats) on harbor seal haulout behavior in Metis Bay, Quebec, Canada. During that study, the authors noted that the most frequent disturbances (n=73) were caused by lower speed, lingering kayaks, and canoes (33.3 percent) as opposed to motorboats (27.8 percent) conducting high-speed passes. The seals' flight reactions could be linked to a surprise factor by kayaks and canoes, which approach slowly, quietly, and low on the water making them look like predators. However, the authors note that, once the animals were disturbed, there did not appear to be any significant lingering effect on the recovery of numbers to their pre-disturbance levels. In conclusion, the study showed that boat traffic at current levels had only a temporary effect on the haul out behavior of harbor seals in the Metis Bay area.

In 2004, Acevedo-Gutierrez and Johnson (2007) evaluated the efficacy of buffer zones for watercraft around harbor seal haulout sites on Yellow Island, Washington. The authors estimated the minimum distance between the vessels and the haulout sites; categorized the vessel types; and evaluated seal responses to the disturbances. During the course of the 7-weekend study, the authors recorded 14 human-related disturbances that were associated with stopped powerboats and kayaks. During these events, hauled out

seals became noticeably active and moved into the water. The flushing occurred when stopped kayaks and powerboats were at distances as far as 453 and 1,217 ft (138 and 371 m) away, respectively. The authors note that the seals were unaffected by passing powerboats, even those approaching as close as 128 ft (39 m), possibly indicating that the animals had become tolerant of the brief presence of the vessels and ignored them. The authors reported that, on average, the seals quickly recovered from the disturbances and returned to the haulout site in less than or equal to 60 minutes. Seal numbers did not return to pre-disturbance levels within 180 minutes of the disturbance less than one quarter of the time observed. The study concluded that the return of seal numbers to pre-disturbance levels and the relatively regular seasonal cycle in abundance throughout the area counter the idea that disturbances from powerboats may result in site abandonment (Johnson and Acevedo-Gutierrez, 2007).

There are other ways in which disturbance, as described previously, could result in more than Level B harassment of marine mammals. They are most likely to be consequences of stampeding, a potentially dangerous occurrence in which large numbers of animals succumb to mass panic and rush away from a stimulus. These situations are: (1) Falling when entering the water at high-relief locations; (2) extended separation of mothers and pups; and (3) crushing of pups by larger animals during a stampede. However, NMFS does not expect any of these scenarios to occur at the project area since (1) there are no high exposure topographical conditions that could result in significant falls; (2) mother pup separation is not expected (see below); and (3) there are no larger pinniped species present that could injure or kill pups in a stampede.

While pups are able to identify and follow their mothers in the water (Stein 1989), they are more likely to become separated and possibly stranded after flushing events (Thiéry and Kiszka 2005, Osinga *et al*. 2012). However, mother- pup separation from construction noise related flushing has been presumed to be unlikely (CDFW 2021). It is

more likely that flushed mother-pup pairs will remain together but not return to their original haulout site and will instead seek out a different undisturbed site (Jansen *et al*. 2014, Suryan and Harvey 1999, Ruiz-Mar *et al*. 2022).

The effects of repeated disturbance may differ for non-pup and non-mother seals. Harbor seals typically demonstrate haulout site fidelity (Yochem *et al*. 1987, Paterson *et al*. 2019). Most seals utilize one primary haulout site and while they may spend several hours in the water after flushing, they will tend to haul out again at that same site. This may result in loss of fitness and increased predation risk for seals returning to Duckabush estuary throughout the construction period as they could be subject to disturbances whenever work is occurring. However, there is evidence that harbor seals that regularly haul out at locations with high anthropogenic activity and elevated in-air noise will habituate to those disturbances (Bankhead *et al*. 2023). Although it is unclear how long this habituation takes, seals that regularly haul out at Duckabush River estuary may become accustomed to the regular in-air construction noise and flush less frequently as construction progresses.

Furthermore, there would be no risk of vessel strike of pinnipeds since no boats are used during construction. Given the nature of the proposed activities (*i.e.* construction activities at a distance) in conjunction with proposed mitigation measures, NMFS is confident that any anticipated effects would be in the form of behavioral disturbance only. NMFS considers the risk of injury, serious injury, or mortality to marine mammals to be very low.

There are minor negative impacts to habitat associated with the proposed activity. There may be a slight increase in turbidity during a limited number of construction activities. However, nearly all construction operations would be land-based, with no impact on turbidity. Furthermore, work crews would minimize these effects through

various methods, including performing work at low tide when possible, and installing silt fences and floating booms around any in-water work.

The proposed project would restore several ecological processes, including sediment transport, freshwater input, and tidal exchange. An increase in suitable haulout locations would be likely due to marsh accretion and channel migration. Restoration of the estuary would benefit habitat for fish species which serve as prey species for harbor seals. Elevating and setting back Highway 101 farther away from haulout sites will decrease the amount of anthropogenic noise and visual disturbance experienced by harbor seals. Given this information, NMFS does not expect that the proposed activity would have any negative effects on marine mammal habitat or prey species at the Duckabush River estuary and that there would be a long-term positive benefit.

Estimated Take of Marine Mammals

This section provides an estimate of the number of incidental takes proposed for authorization through the LOA, which will inform NMFS' consideration of "small numbers," the negligible impact determinations, and impacts on subsistence uses.

Harassment is the only type of take expected to result from these activities. Except with respect to certain activities not pertinent here, section 3(18) of the MMPA (16 U.S.C. 1362(18) defines "harassment" as any act of pursuit, torment, or annoyance, which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) 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 (Level B harassment).

Authorized takes would be by Level B harassment only, in the form of behavioral reactions for individual marine mammals resulting from exposure to visual or acoustic disturbance associated with various construction equipment and personnel or protected

species observers (PSOs). Based on the nature of the activity, Level A harassment is neither anticipated nor proposed to be authorized.

As described previously, no serious injury or mortality is anticipated or proposed to be authorized for this activity. Below we describe how the proposed take numbers are estimated.

Acoustic Impacts

There is very limited potential for impacts from underwater noise to result in harassment of pinnipeds. As noted previously, nearly all construction would be land-based. Pile driving within a wetted channel is only planned at a single location among the river channels and other permanently inundated areas in the project area. A vibratory driver would be used to remove bridge piers within the wetted river channel during the demolition of the existing north Highway 101 bridge (see figure 12 in the USACE's application). The USACE, in consultation with NMFS, concluded that the meandering path of the river at this location would adequately prevent direct propagation of underwater noise to the nearest haulout site and, while it is possible that underwater noise from pile-driving could potentially result in take, it is not considered likely and would be adequately addressed through our consideration of the effects of other, more likely causes of disturbance to seals.

All other vibratory and impact pile driving would occur on solid ground and will either occur during low tide or will be isolated from water using the existing Highway 101 causeway, cofferdams, or aquadams, thereby dampening propagation of sound through the substrate. For in-air sounds, NMFS has established a threshold of received levels above 90 dB re 20 µPa (rms) that could result in behavioral harassment (Level B harassment) of harbor seals. The actual measured in-air Lmax (dBA) at 50 feet (15.24 m) for vibratory and impact pile drivers is 101 dB (FHWA 2017). Noise attenuates as the distance from the source of the noise increases. A general equation shows noise

propagation loss as 7.5 dB for each doubling of distance in areas where landscape features and vegetation exist (WSDOT 2020). Additionally, the following equation can be used to determine construction noise levels at a specific distance from the source (WSDOT 2020):

Lmax = the Construction Lmax at 50 feet (15.24 m) – 25 * Log(D/Do). In this equation, Lmax = the highest A-weighted sound level occurring during a noise event during the time that noise is being measured; 50 feet (15.24 m) = the reference measurement distance; and D = the distance from the noise source.

Do = the reference measurement distance (50 feet (15.24 m) in this case). Using this equation, a 101 dB vibratory or impact pile driver will attenuate to 90 dB after 54 m (177 ft). The nearest vibratory pile driving site in the project area is about 265 m (870 ft) from known harbor seal haulout sites at the Duckabush River estuary. Therefore, Level B harassment from airborne noise could only occur if a seal left their haulout site and proceeded to within 54 m (177 ft) of an active pile driving site.

Marine Mammal Occurrence

In this section we provide information about the occurrence of marine mammals, including abundance or other relevant information which will inform the take calculations.

WDFW conducts regular aerial surveys of hauled out harbor seals in the Hood Canal, typically restricting monitoring to the peak of the pupping period and the window two hours before and after high tides to maximize the number of individuals on land. The USACE utilized unpublished WDFW data from 2021-2023 (USACE, 2024) as well as aerial survey information of hauled out harbor seals at Duckabush River in 2013 and 2014 (Jeffries *et al*. 2014) to estimate harbor seal abundance. Table 2 summarizes the results from both surveys.

From 2021-2023, an average of 86 seals hauled out at the Duckabush River estuary during the pupping season, with a maximum daily count of 130 seals. Harbor seal counts during the molting season peaked at 23 per day although data during this period is limited. Available count data outside of the critical life history periods of pupping and molting season is also limited but indicated scarce usage of Duckabush River estuary haulout sites during the daytime for this period.

Table 2. Harbor seal counts at Duckabush Estuary

Date	Year	Pups	Adults	Total Count
February 4	2014	0	0	0[a]
March 13	2013	0	0	0[a]
March 21	2013	0	7	7[a]
July 23	2013	0	0	0[a]
August 26	2013	17	60	77[a]
August 27	2013	21	78	99[a]
September 21	2023	3	127	130[b]
September 22	2023	2	94	96[b]
September 28	2021	2	85	87[b]
September 29	2022	4	111	115[b]
October 17	2023	1	3	4[a]
November 6	2013	0	23	23[a]
November 8	2013	0	13	13[a]

Count source: [a] – Jeffries *et al.* (2014), [b] – WDFW (unpublished)

Take Estimation

Here, we describe how the information provided above is synthesized to produce a quantitative estimate of the take that is reasonably likely to occur and proposed for authorization.

Since there is no previous data on how harbor seals react to construction activities at the Duckabush River estuary, take rates from an analogous project were utilized to estimate take. The Elkhorn Slough Tidal Marsh Restoration Project in Monterey County,

California is a similar wetland restoration project involving land-based construction near harbor seal haulout sites (CDFW 2021). NMFS has issued IHAs for all three phases of this project, all authorizing take by Level B harassment of harbor seals resulting from similar disturbances as considered here, including the use of haul trucks, dozers, backhoes, loaders, and excavators. The objective of both projects is to restore tidal marshes that have been altered by past land use practices. The Elkhorn Slough project is in the process of restoring 147 wetland acres while the DMMP project would restore 38 acres. Impacts from both projects include the potential for Level B harassment of harbor seals by visual disturbance and in-air noise.

Due to the limited harbor seal survey data at the Duckabush River estuary, a basic model was used to estimate seal counts throughout the year. Using the survey data from table 3, it was assumed that there is an increase or decrease in the number of seals, as defined by use of a linear function (instead of a block function). This means that every day of the year has a unique number of seals based on a linear relationship between a specific date on which a certain number of seals were actually recorded and the next specific date on which seals were recorded. For example, in table 2, there were 99 total seals (pups and adults) recorded on August 27, while 130 total seals were recorded on September 21. Using a linear relationship, it was assumed that 100.24 seals were observed on August 28 (one day after the date of recording - August 27 with 99 seals) observation, while 128.76 seals were observed on September 20 (one day before the next actual date of recording - September 20 with 130 seals). This methodology allows each day of the year to have a unique number of assumed seals present. The USACE developed a detailed project schedule which identified the number of workdays expected to occur for each year of the proposed authorization, ranging from a minimum of 111 days in 2026 to a maximum of 262 days in 2029. The USACE further identified the specific dates of each year that work is planned. The sum of the number of observed seals

associated with each specified work date was then calculated for each year of the proposed authorization.

Monitoring reports from the Elkhorn Slough Tidal Marsh Restoration Project showed that nine percent of harbor seals present were recorded as takes in Phase I of the Elkhorn Slough Tidal Marsh Restoration Project while 0.7 percent were recorded as takes in Phase II. Monitoring data from Phase III of the project is not available, so the conservative assumption of nine percent take rate will be used to estimate realized take in this proposed rule. The sum of the number of assumed seals present calculated for each year, as described previously, was then multiplied by nine percent to provide the calculated annual take estimates shown in table 3.

Table 3 — Proposed Takes by Level B Harassment Annually

Year	NMFS stock abundance	Predicted Work Dates	Predicted Work Days	Estimated Total Seals Exposed	Estimated Take by Level B Harassment	Take % of Stock
2026	3,363	July 30 – December 31	111	4,883	440	13.1
2027		January 1 – December 31	261	5,331	480	14.3
2028		January 1 – December 31	260	5,310	478	14.2
2029		January 1 – November 7	262	5,090	458	13.6

To inform both the negligible impact analysis and the small numbers determination, NMFS assesses the maximum number of takes of marine mammals that could occur within any given year during the effective LOA period. In this calculation, the maximum estimated number of Level B harassment takes in any one year (480 in 2027) is used to yield the highest number of estimated take that could occur in any year (table 3). Table 3 also depicts the number of takes requested by the USACE and proposed by NMFS relative to the abundance of the Hood Canal stock.

Proposed Mitigation

In order to issue an LOA under section 101(a)(5)(A) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable adverse impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses (latter not applicable for this action). NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, NMFS considers two primary factors:

(1) The manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), the likelihood of effective implementation (probability implemented as planned), and;

(2) The practicability of the measures for applicant implementation, which may consider such things as cost and impact on operations.

The mitigation measures described in the following sections would apply to the USACE construction activities.

The USACE shall conduct training between supervisors and crews, the PSO team, and relevant USACE staff prior to the start of DERP construction so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. If new construction personnel are added to the project, the contractor shall ensure that the personnel receive the mandatory training before starting work.

Visual Monitoring

Required monitoring must be conducted by dedicated, trained, NMFS-approved PSO(s). PSOs shall establish and monitor a 300-meter zone around all construction activities. A PSO will be present every day when construction activities occur in or near the DERP area. A 30-minute pre-clearance observation period will occur prior to the start of construction activities. Construction may not start until the work area is cleared by the PSOs. Monitoring will occur until 30 minutes after construction is complete. One or more PSOs will be stationed at location(s) offering the best view of four haulout sites and the project area as described in the USACE's marine mammal monitoring plan (MMMP).

If environmental conditions deteriorate such that marine mammals within the entire shutdown zone (10 m) would not be visible (*e.g.,* fog, heavy rain), construction must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected.

Pre-Construction Clearance and Ramp-up

A 30-minute pre-clearance observation period must occur prior to the start of ramp-up and construction activities. The USACE must adhere to the following pre-clearance and ramp-up requirements: (i) Construction activities must not be initiated if any marine mammal is within 10 m of planned operations. If a marine mammal is observed within 10 m of planned operations during the 30-minute pre-clearance period, ramp-up must not begin until the animal(s) has been observed exiting the zones or until

an additional time period has elapsed with no further sightings (ii) Construction activities may not be initiated within 100 meters of a mother-pup pair in the water.

To reduce the risk of potentially startling marine mammals with a sudden intensive sound, the contractor will ramp-up construction activities gradually each day by moving around the project area and starting equipment one at a time.

Shutdown Requirements

For heavy machinery work, if a marine mammal comes within 10 meters of such operations, operations must cease work or will not be initiated until the marine mammal has moved outside the 10-meter buffer. During pupping season (August 1-October 31) construction activities may not be initiated: (1) Within 300 meters of a mom/pup pair that is hauled out, or (2) within 100 meters of a mom/pup pair in the water. If a pup less than 1 week old (neonate) comes within 20 meters of where heavy machinery is working, construction activities in that area must be shutdown or delayed until the pup has left the area.

Activities must cease if a marine mammal species for which take was not authorized, or a species for which authorization was granted but the authorized number of takes have been met, is observed by PSOs approaching or within the Level B harassment zone. Activities must not resume until the animal is confirmed to have left the area.

Based on our evaluation of the applicant's proposed measures, NMFS has preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable adverse impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

In order to issue an LOA for an activity, section 101(a)(5)(A) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of such

taking. The MMPA implementing regulations at 50 CFR 216.104(a)(13) require that requests for authorizations include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present while conducting the activities. Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

- Occurrence of marine mammal species or stocks in the area in which take is anticipated (*e.g.*, presence, abundance, distribution, density);
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.*, source characterization, propagation, ambient noise); (2) affected species (*e.g.*, life history, dive patterns); (3) co-occurrence of marine mammal species with the activity; or (4) biological or behavioral context of exposure (*e.g.*, age, calving or feeding areas);
- Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors;
- How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2) populations, species, or stocks;
- Effects on marine mammal habitat (*e.g.*, marine mammal prey species, acoustic habitat, or other important physical components of marine mammal habitat); and,
- Mitigation and monitoring effectiveness.

Visual Monitoring

PSO monitoring during construction will occur from vantage points along the current Highway 101 elevated causeway that allow monitors to observe any seals hauling out in the estuary as shown in the Marine Mammal Monitoring Plan. The primary observation locations shall be on the northern Highway 101 bridge and at the head of the existing estuary access path that will become the temporary parking platform. Monitors may also traverse along the Highway 101 causeway to obtain clearer views of approaching or hauled-out seals, such as from the southern Highway 101 bridge or North Parking Area. The observation area for the restoration area shall be accessed by foot and used to provide a vantage point of the construction area and Duckabush River estuary. This observation area includes all restoration areas within 300 meters of harbor seal haulout sites.

Marine mammal monitoring during construction activities must be conducted by qualified, NMFS approved PSOs, in accordance with the following:

- PSOs must be independent of the activity contractor (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods.
- At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
- Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
- PSOs must be approved by NMFS prior to beginning any activity subject to this proposed rule.

PSOs should have the following additional qualifications:

- Ability to conduct field observations and collect data according to assigned protocols;
- Experience or training in the field identification of marine mammals, including the identification of behaviors;
- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;
- Writing skills sufficient to prepare a report of observations including but not limited to: (1) the number and species of marine mammals observed; (2) dates and times when in-water construction activities were conducted; (3) dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and (4) marine mammal behavior; and
- Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

Pre- and Post-Construction Daily Censuses

A census of marine mammals in the project area and the area surrounding the project will be conducted 30 minutes prior to the beginning of construction on monitoring days, and again 30 minutes after the completion of construction activities. Data collected during the pre-and post-construction daily censuses will include:

- Environmental conditions (weather condition, tidal conditions, visibility, cloud cover, air temperature and wind speed);
- Numbers of each marine mammal species spotted;
- Location of each species spotted, including distance from construction activity;
- Status (in water or hauled-out); and
- Behavior.

Hourly Counts

The USACE will conduct hourly counts of animals hauled out and in the water. Data collected will include:

- Numbers of each species;
- Location of species, whether hauled out or in the water; and distance from construction activities;
- Time;
- Tidal conditions;
- Time construction activities start and end;
- Primary construction activities occurring during past hour;
- Any noise or visual disturbance;
- Number of mom/pup pairs and neonates observed;
- Notable behaviors, including foraging, grooming, resting, aggression, mating activity, and others;

PSOs will take notes including any of the following information to the extent it is feasible to record:

- Age-class;
- Sex;
- Unusual activity or signs of stress; and
- Any other information worth noting

PSOs will record reaction observed in relation to construction activities including:

- Tally of each reaction;
- Time of reaction;
- Concurrent construction activity (including duration) and assumed cause (whether related to construction activities or not) and observer determination as to the source of disturbance, to the extent possible;

- Location of animal during initial reaction and distance from the noted disturbance;
- Direction of movement;
- Activity before and after disturbance;
- Status (in water or hauled out) before and after disturbance; and
- Coded reaction as shown in table 4

Table 4— Marine Mammal Reaction Codes

Level	Type of Response	Definition
1	Alert	Head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck or craning head and neck while holding the body rigid in a u-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length. Alerts would be recorded, but not counted as a 'take'.
2*	Movement	Movements away from the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats, or if already moving a change of direction of greater than 90 degrees.
3*	Flush	All retreats (flushes) to the water.

* Only Levels 2 and 3 are considered take under the MMPA, whereas Level 1 is not.

Reporting

The USACE must submit a draft monitoring report to NMFS within 90 calendar days of the completion of each construction year. A draft comprehensive 5-year summary report must also be submitted to NMFS within 90 days of the end of the effective period of the LOA. The reports must detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports and the final comprehensive report must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final

report addressing NMFS comments must be submitted within 30 days after receipt of comments. The annual and final marine mammal monitoring reports would include an overall description of work completed, a narrative regarding marine mammal sightings, and associated PSO data sheets. Specifically, the report must include:

- Dates and times (begin and end) of all marine mammal monitoring;
- Construction activities occurring during each daily observation period
- PSO locations during marine mammal monitoring;
- Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;
- Upon observation of a marine mammal, the following information: (1) name of PSO who sighted the animal(s) and PSO location and activity at time of sighting; (2) time of sighting; (3) identification of the animal(s) (*e.g.,* genus/species, lowest possible taxonomic level, or unidentified); (4) distance and bearing of each marine mammal observed relative to the pile being driven for each sighting (if pile driving was occurring at time of sighting); (5) estimated number of animals (min/max/best estimate); (6) estimated number of animals by cohort (*e.g.,* adults, juveniles, neonates, group composition, *etc.*); (7) animal's closest point of approach; and (8) description of any marine mammal behavioral observations (*e.g.,* observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.,* no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);
- Number of marine mammals detected within the harassment zones; and

- Detailed information about any implementation of any mitigation triggered (*e.g.,* shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

Negligible Impact Analysis and Determination

NMFS has defined negligible impact as an impact resulting from the specified activity 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 (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through harassment, NMFS considers other factors, such as the likely nature of any impacts or responses (*e.g.*, intensity, duration), the context of any impacts or responses (*e.g.*, critical reproductive time or location, foraging impacts affecting energetics), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with NMFS' implementing regulations (54 FR 40338, September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the baseline (*e.g.*, as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

The USACE has requested, and NMFS is proposing to authorize take, by Level B harassment, of harbor seals from the Washington Inland Hood Canal stock. No injuries or mortalities are anticipated to occur as a result of the DERP project and none are proposed to be authorized. Effects on individuals that are taken by Level B harassment, on the

basis of reports in the literature, would likely be localized and limited to reactions such as alerts or movements away from the construction area, including flushing into the water. Most likely, individuals, if affected at all will simply move away from the visual or acoustic stimulus and be temporarily displaced from the areas.

Repeated exposures of individuals to relatively low levels of visual and sound disturbance outside of preferred habitat areas are unlikely to significantly disrupt critical behaviors or result in permanent abandonment of the haulout site. Even repeated Level B harassment of some small subset of the overall stock is unlikely to result in any significant realized decrease in viability for the affected individuals, and thus would not result in any adverse impact to the stock as a whole. Level B harassment will be reduced to the level of least practicable adverse impact through use of mitigation measures described herein. If visual disturbance and low-level sound produced by project activities is sufficiently disturbing, animals are likely to simply avoid the area while the activity is occurring.

No adverse effects to habitat or prey species are anticipated during or after construction has ended since almost the entirety of work would be land-based. There is other suitable habitat nearby where harbor seals could temporarily relocate. The restoration of the marsh habitat will have no adverse effect on marine mammal habitat, but possibly a long-term beneficial effect on habitat and harbor seals by improving ecological function of the slough, including increased prey availability, higher species diversity, larger fish, and improved habitat.

Harbor seals are not listed as threatened or endangered under the ESA and there are no known areas of biological importance in the project area. Furthermore, the population of the Hood Canal stock of harbor seals has been relatively stable over the past three decades (Pearson *et al*. 2024).

Taking into account the planned mitigation measures, effects to marine mammals are generally expected to be restricted to short-term changes in behavior or temporary displacement from haulout sites. There are other haulout areas for pinnipeds to temporarily relocate, and marine mammals are expected to return to the area shortly after activities cease.

In summary and as described above, the following factors primarily support our preliminary determination that the impacts resulting from this activity are not expected to adversely affect harbor seals (or any other species) through effects on annual rates of recruitment or survival:

- No serious injury, mortality or Level A harassment is anticipated or proposed to be authorized;
- Effects of the activities would be limited to localized behavioral changes and temporary displacement;
- Nominal adverse impacts to pinniped habitat are anticipated while improved ecological processes in the estuary would result in positive effects to habitat;
- No biologically important areas have been identified in the project area; and
- Mitigation measures are anticipated to be effective in minimizing the number and severity of takes by Level B harassment, which are expected to be localized.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from the proposed activity will have a negligible impact on all affected marine mammal species or stocks.

Small Numbers

As noted previously, only take of small numbers of marine mammals may be authorized under sections 101(a)(5)(A) and (D) of the MMPA for specified activities

other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the maximum number of individuals taken in any year to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. When the predicted maximum annual number of individuals to be taken is fewer than one-third of the species or stock abundance, the take is considered to be of small numbers. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

Table 3 demonstrates the maximum number of Level B harassment events per year. Our analysis shows that no more than 13.4 percent of harbor seals could be taken by Level B harassment. The numbers of animals proposed to be taken for these stocks would be considered small relative to the relevant stock's abundances, even if each estimated taking occurred to a new individual—an extremely unlikely scenario.

Based on the analysis contained herein of the proposed activity (including the proposed mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS preliminarily finds that small numbers of marine mammals would be taken relative to the population size of the affected species or stocks.

Unmitigable Adverse Impact Analysis and Determination

There are no relevant subsistence uses of the affected marine mammal stocks or species implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Adaptive Management

The regulations governing the take of marine mammals incidental to the USACE’s construction activities would contain an adaptive management component. The

reporting requirements associated with this proposed rule, if adopted, are designed to provide NMFS with monitoring data from completed projects to allow consideration of whether any changes are appropriate. The use of adaptive management allows NMFS to consider new information from different sources to determine (with input from the USACE regarding practicability) on an annual or biennial basis if mitigation or monitoring measures should be modified (including additions or deletions). Mitigation measures could be modified if new data suggests that such modifications would have a reasonable likelihood of reducing adverse effects to marine mammals and if the measures are practicable.

The following are some of the possible sources of applicable data to be considered through the adaptive management process: (1) results from monitoring reports, as required by MMPA authorizations; (2) results from general marine mammal and sound research; and (3) any information which reveals that marine mammals may have been taken in a manner, extent, or number not authorized by these regulations or LOAs issued pursuant to these regulations.

Endangered Species Act

Section 7(a)(2) of the ESA of 1973 (16 U.S.C. 1531 *et seq*.) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of proposed rules, NMFS consults internally whenever we propose to authorize take for endangered or threatened species.

No incidental take of ESA-listed species is proposed for authorization or expected to result from this activity. Therefore, NMFS has determined that formal consultation under section 7 of the ESA is not required for this action.

Request for Information

NMFS requests interested persons to submit comments, information, and suggestions concerning the USACE's request and the proposed regulations (see **ADDRESSES**). All comments germane to this rulemaking will be reviewed and evaluated as we prepare a final rule and make final determinations on whether to issue the requested authorization. This proposed rule and referenced documents provide all environmental information relating to our proposed action for public review.

Classification

The Office of Management and Budget has determined that this proposed rule is not significant for purposes of Executive Order 12866. This proposed rule is not an Executive Order 14192 regulatory action because this rule is not significant under Executive Order 12866.

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The USACE is the sole entity that would be subject to the requirements in these proposed regulations, and the USACE is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Therefore, a regulatory flexibility analysis is not required and none has been prepared.

This proposed rule does not contain a collection-of-information requirement subject to the provisions of the Paperwork Reduction Act (PRA) because the applicant is a Federal agency.

Dated: August 13, 2025.

Samuel D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service

List of Subjects in 50 CFR Part 217

Administrative practice and procedure**,** Exports**,** Fish**,** Imports, Marine mammals, Penalties, Reporting and recordkeeping requirements**,** Transportation, Wildlife.

For the reasons set forth in the preamble, NMFS proposes to amend 50 CFR part 217 as follows:

PART 217—REGULATIONS GOVERNING THE TAKE OF MARINE MAMMALS INCIDENTAL TO SPECIFIED ACTIVITIES

1. The authority citation for part 217 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq*., unless otherwise noted.

2. Add subpart Y to part 217 to read as follows:

Subpart Y – Taking of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the Duckabush Estuary Restoration Project in Washington

Sec.

217.240 Specified activity and geographical region.

(a) Regulations in this subpart apply only to the United States Army Corps of Engineers (USACE) and those persons it authorizes or funds to conduct activities on its

behalf for the taking of marine mammals that occur in the areas outlined in paragraph (b) of this section and that occur incidental to construction activities, including maintenance and replacement of piles, as designated in the Duckabush Estuary Restoration Project in Washington. Requirements imposed on the USACE pursuant to this subpart must be implemented by those persons it authorizes or funds to conduct activities on its behalf.

(b) The taking of marine mammals by the USACE may be authorized in a Letter of Authorization (LOA) only if it occurs as part of the Duckabush Estuary Restoration Project in Washington.

§ 217.241 Effective dates.

Regulations in this subpart are effective from July 30, 2026 through July 29, 2031.

§ 217.242 Permissible methods of taking.

Under an LOA issued pursuant to §§ 216.106 of this chapter and 217.246 of this chapter, the Holder of the LOA (hereinafter "USACE") may incidentally, but not intentionally, take marine mammals within the area described in § 217.240 (b) by harassment associated with construction activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the applicable LOA.

§ 217.243 Prohibitions.

(a) Except for the takings contemplated in § 217.242 and authorized by an LOA issued under this subpart, it is unlawful for any person to do any of the following in connection with the activities described in § 217.240:

(1) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a LOA issued under this subpart;

(2) Take of any marine mammal not specified in such LOA;

(3) Take any marine mammal specified in such LOA in any manner other than as specified;

(4) Take a marine mammal specified in such LOA if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(5) Take a marine mammal specified in such LOA after NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

(b) [Reserved]

§ 217.244 Mitigation requirements.

(a) When conducting the activities identified in § 217.240(a), the mitigation measures contained in any LOA issued under this subpart must be implemented. These mitigation measures include but are not limited to:

(1) A copy of this LOA must be in the possession of the USACE, supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the USACE operating under the authority of this LOA at all times that activities subject to this LOA are being conducted.

(2) The USACE shall conduct training between supervisors and crews, the PSO team, and relevant USACE staff prior to the start of construction activity subject to this rule, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained in the aforementioned matters prior to commencing work.

(3) The USACE must employ PSOs and establish monitoring locations as described in the Marine Mammal Monitoring Plan. The USACE must monitor the Project Area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions.

(4) Monitoring must take place from 30 minutes prior to initiation of pile driving activity (*i.e.*, pre-start clearance monitoring) through 30 minutes post-completion of construction activity.

(5) Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones are clear of marine mammals. Construction activity may commence following 30 minutes of observation when the shutdown zones are clear of marine mammals.

(6) Construction activities must stop if a marine mammal is in a shutdown zone and may not resume until a marine mammal exits the shutdown zone.

(7) If construction activity is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone.

(8) The USACE must conduct a gradual increase (*i.e*. ramp-up) to begin construction each day by moving around the project area and starting equipment one at a time, not all at once.

(9) The USACE must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 meters (m) of such activity operations must cease to avoid direct physical interaction and can only resume after the animal has left the 10 m zone.

(10) If a pup less than one week old comes within 20 m of where heavy machinery is working, operations must cease and can only resume after the animal has left the 20 m zone.

(11) During pupping season (August 1 through October 31), construction activities may not be initiated within 300 m of a mom/pup pair that is hauled out or within 100 m of a mom/pup pair in the water.

(b) [Reserved]

§ 217.245 Requirements for monitoring and reporting.

(a) The USACE must submit a Marine Mammal Monitoring Plan to NMFS for approval at least 90 days in advance of construction. Marine mammal monitoring must be conducted in accordance with the conditions in this section and the approved Marine Mammal Monitoring Plan.

(b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:

(1) PSOs must be independent of the activity contractor (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods.

(2) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(3) Other PSOs may substitute other relevant experience, education (*i.e.*, degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

(4) PSOs must record all observations of marine mammals as described in the Marine Mammal Monitoring Plan, regardless of distance from the pile being driven. PSOs shall document any behavioral reactions in concert with distance from piles being driven or removed.

(c) A census of marine mammals in the project area and the area surrounding the project must be conducted 30 minutes prior to the beginning of any construction day, and again 30 minutes after the completion of construction activities. Data collected during the pre-and post-construction daily censuses must include:

(1) Environmental conditions (weather condition, tidal conditions, visibility, cloud cover, air temperature and wind speed);

(2) Numbers of each marine mammal species spotted;

(3) Location of each species spotted, including distance from construction activity;

(4) Status (in water or hauled-out); and

(5) Behavior

(d) The USACE must conduct hourly counts of animals hauled out and in the water. Data collected must include:

(1) Numbers of each species;

(2) Location of species; whether hauled-out or in the water; and distance from construction activities;

(3) Time;

(4) Tidal conditions;

(5) Time construction activities start and end;

(6) Primary construction activities occurring during past hour;

(7) Any noise or visual disturbance;

(8) Number of mom/pup pairs and neonates observed; and

(9) Notable behaviors, including foraging, grooming, resting, aggression, mating activity, and others;

(e) The USACE must note any of the following information to the extent it is feasible to record:

(1) Age-class;

(2) Sex;

(3) Unusual activity or signs of stress;

(4) Any other information worth noting;

(f) The USACE must record reaction observed in relation to construction activities including:

(1) Tally of each reaction;

(2) Time of reaction;

(3) Concurrent construction activity (including duration) and assumed cause (whether related to construction activities or not) and whether observer feels the disturbance was visual or acoustic;

(4) Location of animal during initial reaction and distance from the noted disturbance;

(5) Direction of movement;

(6) Activity before and after disturbance;

(7) Status (in water or hauled out) before and after disturbance; and

(8) Coded reaction of Level 1 - Alert; Level 2 – Movement, or Level 3 – Flush as defined in the Preamble.

(g) The USACE must submit a draft monitoring report to NMFS within 90 calendar days of the completion of each construction year. A draft comprehensive 5-year summary report must also be submitted to NMFS within 90 days of the end of the project. The reports must detail the monitoring protocol and summarize the data recorded during monitoring. Final annual reports and the final comprehensive report must be prepared and submitted within 30 days following resolution of any NMFS comments on the draft report. If no comments are received from NMFS within 30 days of receipt of the draft report, the report must be considered final. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments. The reports must contain the informational elements described at minimum below including:

(1) Information collected in § 247.245 (c) – (f).

(2) All PSO datasheets and/or raw sightings data in electronic format.

§ 217.246 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the USACE must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, the USACE may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, the USACE must apply for and obtain a modification of the LOA as described in § 217.247.

(e) The LOA must set forth the following information:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA must be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA must be published in the **Federal Register** within 30 days of a determination.

§ 217.247 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under § 216.106 of this chapter and § 217.246 for the activity identified in § 217.240(a) may be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations; and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the **Federal Register**, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 of this chapter and 217.246 for the activity identified in § 217.240 (a) may be modified by NMFS under the following circumstances:

(1) NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with USACE regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations;

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from USACE's monitoring from previous years;

(B) Results from other marine mammal and/or sound research or studies; and

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs; and

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS must publish a notice of proposed LOA in the **Federal Register** and solicit public comment;

(2) If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in a LOA issued

pursuant to § 216.106 of this chapter and § 217.246, a LOA may be modified without prior notice or opportunity for public comment. Notification would be published in the **Federal Register** within 30 days of the action.

§§ 217.248 - 217.249 [Reserved]

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