Coastal Zone Management Act (CZMA) Action Exclusion Agreement between the Washington Department of Ecology (Ecology) and the United Stated Navy Naval Facilities Engineering Systems Command Northwest (NAVFAC NW)

RE: *De minimis* and environmentally beneficial activities contemplated by the CZMA

The Coastal Zone Management Act (CZMA; 16 U.S.C §1451-1466) established a national policy to preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone. It also provides an operational framework for states to develop Coastal Zone Management Programs (CZMPs). Ecology implements Washington's CZMP and the federal consistency provisions of the CZMA, which were designed to give states a voice in federal agency decision making (which they would otherwise not have) for activities that affect a state's coastal uses or resources. Under <u>15 CFR</u> <u>Part 930 Subpart C</u> of the federal consistency regulations, federal agencies (such as the Navy) whose actions affect any coastal use or resource shall ensure that they are carried out in a manner consistent to the maximum extent practicable with the enforceable policies of federally approved state CZMPs. Under <u>15 C.F.R. 930.33(a)(3)(i) and 15 C.F.R. 930.33(a)(4)</u>, federal agencies are encouraged to review their activities, other than development projects within the coastal zone, to identify *de minimis* activities and environmentally beneficial activities, and request State agency concurrence that these *de minimis* and environmentally beneficial activities should not be subject to further state agency CZMA federal consistency review.

The Navy proposes to exclude the de minimis activities listed in **Section 1** and the environmentally beneficial activities listed in **Section 2** of this document from further federal consistency review for five years in accordance with the CZMA. After five years, the Navy and Ecology shall either reevaluate the *de minimis* and environmentally beneficial activities and agree to further exclusion under the CZMA, or the Navy shall submit individual consistency determinations to Ecology for each Navy activity as they are proposed.

Ecology would agree to this exclusion only for the activities listed below as they are described. Ecology does not agree to this exclusion for any other activity that may be associated with one of the *de minimis* or environmentally beneficial activities described in the sections below, or to any projects in their entirety if they contain elements that do not fall under one of the agreed-upon *de minimis* or environmentally beneficial activities. This exclusion will not apply to Navy activities in which an evaluation of the circumstances of a particular proposal indicates that the activity will have effects that are not *de minimis* or environmentally beneficial to coastal uses or resources, as applicable, and in such cases the Navy should submit an individual consistency determination to Ecology for CZMA federal consistency review.

The enforceable policies of Washington's CZMP were used to assess the proposed activities and determine their applicability as *de minimis* or environmentally beneficial. These enforceable policies are as follows:

- State Shoreline Management Act (SMA) [RCW 90.58]
 - Implementing Regulations at WACs 173-15, 18, 20, 22, and 26
- State Water Pollution Control Act (WPCA) [RCW 90.48]
 - Implementing Regulations at WACs 173-40 to 270, 372-52 to 68
- Washington Clean Air Act (WCAA) [RCW 70.94]
 - Implementing Regulations at WACs 173-400 to 495
- State Ocean Resources Management Act (ORMA) [RCW 43.143]
 - Ocean Management Guidelines at WAC 173-26-360
- The Marine Spatial Plan (MSP) for Washington's Pacific Coast
 - Important, Sensitive and Unique (ISU) Areas
 - Fisheries Protection Standards

Section 1 of this document contains a list of the Navy's proposed activities that typically have *de minimis* effects on uses and resources in the Washington State coastal zone. An action which has *de minimis* effects may still have coastal effects (<u>15 C.F.R. 930.33(a)(1)</u>), but is expected to have insignificant direct or indirect (cumulative and secondary) coastal effects in which the state agency concurs are *de minimis* (<u>15 C.F.R 930.33 (a)(3)(ii)</u>). Therefore, in determining whether a particular activity qualifies as a *de minimis* effect, each project or activity has been evaluated individually by the Navy and Ecology, considering the cumulative effects of all previous, current, and planned activities on and around the installation and the proximity of the project or activity to any coastal uses or resources.

To be considered *de minimis*, the activities listed in Section 1 would need to meet the definition of *de minimis* as described above. Impacts would need to be not significant by having limited context (the geographic, biophysical, and social context in which the coastal effects would occur) or low intensity impacts (the severity of the impact, in whatever context it occurs). Low intensity impacts include negligible, minor, and moderate impacts. Negligible impacts are defined as having such little consequences as to not require additional consideration or mitigation. Minor impacts are those where the effect to the coastal resource would be perceptible; however, the effect would not result in an overall change in resource character. Moderate impacts are those where the effect to the coastal resource to their limited context and intensity. Significant impacts are those where the effect to the coastal resource would be perceptible and severe, resulting in an overall change in resource character to the coastal resource would be perceptible and severe, resulting in an overall change in resource character. Definitions below are from the Chief of Naval Operations Instruction manual (OPNAV-M) 5090.1 (2021).

<u>Direct Impacts</u>: Direct effects are caused by the action and occur at the same time and place. Activities that occur from implementation of the proposed action would directly effect a change, and initial effects would be immediately evident (OPNAV-M-5090.1 10 5.18.b). <u>Indirect Impacts</u>: Indirect effects are caused by the action but are later in time or farther removed in distance and are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Activities that occur from implementation of the proposed action would not effect this change, but would enable change to occur, or change would occur later in time, or farther in distance than the actions (OPNAV-M-5090.1 10 5.18.b).

<u>Cumulative Impacts</u>: Cumulative impact is the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (OPNAV-M-5090.1 10 5.18.c).

Categorical Exclusions (CATEX) are categories of actions listed in 32 C.F.R. 775.6(f) that have been determined to have no significant effect on the human environment, individually or cumulatively; the CATEX numbers below are for the sole use of the Navy

Section 2 of this document contains the Navy's proposed environmentally beneficial activities. This category of activities includes those that protect, preserve, or restore the natural resources of Washington's coastal zone in accordance with <u>15 C.F.R. 930.33(a)(4)</u>. The proposed beneficial activities are not primarily meant for the purpose and benefit of stormwater best management practices or mitigation as a result of a permitted activity.

Section 3 of this document contains the Navy's best management practices (BMPs) that will be implemented for each activity in Sections 1 & 2 to protect water quality, coastal uses, and coastal resources. BMPs are defined as resource management decisions that are based on the latest professional and technical standards for the protection, enhancement, and rehabilitation of natural resources. The Navy's relevant BMPs for these proposed activities include federal or state laws and regulations, schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollution. BMPs also include treatment requirements, operating procedures, and control practices.

Section 1: Proposed De Minimis Activities

The following list identifies the Navy's proposed *de minimis* activities. This list is not applicable to activities that require a federal authorization.¹, such as a Nationwide Permit from the U.S. Army Corps (Corps). Additionally, for any of these activities occurring on state-owned aquatic lands, the Navy shall contact the Washington Department of Natural Resources (DNR) before any project is initiated.

¹ <u>https://www.ecfr.gov/current/title-15/subtitle-B/chapter-IX/subchapter-B/part-930#subpart-D</u>

1.1 Existing buildings, facilities, or structures:

- a. Routine use and operation of existing facilities, laboratories, and equipment. (Navy CATEX #3)
- b. Routine repair and maintenance of buildings, facilities, vessels, aircraft, ranges, and equipment associated with existing operations and activities including localized pest management activities, minor erosion control measures, painting, refitting, general building/structural repair, landscaping, and grounds maintenance. (Navy CATEX #8)
- c. Decisions to close facilities, decommission equipment, or temporarily discontinue use of facilities or equipment, where the facility or equipment is not used to prevent or control environmental impacts. (Navy CATEX #36)
- d. Minor alterations of and additions to existing buildings, facilities, and systems (e.g., structures, roads, runways, vessels, aircraft, equipment) where operations will remain substantially the same and the use is consistent with applicable regulations, such as reroofing or repaving. (Navy CATEX #14)
- e. Demolition, disposal, or improvements involving buildings or structures when done in accordance with regulations applying to removal of asbestos, polychlorinated biphenyls (PCB), and other hazardous materials (Navy CATEX #34). Improvements are material betterments or capital investments that would not increase the physical size of the building or structure.

1.2 Road Maintenance and Parking Maintenance (within the same footprint or less):

- a. Routine repairs including but not limited to milling, grooving, stripping, repairing (patching or slurry seal), striping, or resurfacing that does not result in a net increase in stormwater discharge.
- b. Barrier skirt and pop-up barrier maintenance and repair.

1.3 Grounds Maintenance:

- a. Routine grounds maintenance, including but not limited to mowing existing mowed areas; seeding/reseeding; planting and replacement of flowers, trees, and shrubs.
- b. Maintenance of vegetation within existing firebreaks, airfield/radar clear zones, airfield imaginary surfaces, firing lines, lines of sight, ranges, anti-terrorism/force protection fence lines, and building clearance requirements not involving grubbing or other excavation.
- c. Maintenance and in-kind replacement of existing upland fencing.
- d. Minor repairs in response to wildfires, floods, earthquakes, landslides, or severe weather events that threaten public health or safety, security, property, or natural and cultural resources, that are necessary to repair or improve lands unlikely to recover to a management-approved condition (i.e., the previous state) without intervention, and that do not occur in streams. Such activities include, but are not limited to: Repair of existing essential erosion control structures or installation of temporary erosion controls; repair of electric power transmission infrastructure; replacement or repair of storm water conveyance structures, roads, trails, fences, and minor facilities; revegetation; construction of protection fences; and removal of hazard trees, rocks, soil, and other mobile debris from, on, or along roads, trails, or streams (Navy CATEX #46);
- e. Natural resources management actions undertaken or permitted pursuant to agreement with or subject to regulation by, State, or local organizations having management responsibility and authority over the natural resources in question, including, but not limited to: prescribed burning, invasive species actions, timber harvesting, and hunting and fishing during seasons established by State authorities pursuant to their State fish and game management laws. The natural resources management actions must be consistent with the overall management

approach of the property or other applicable natural resources management plan. (Navy CATEX #45)

1.4 Utilities

- a. Acquisition, installation, modernization, repair, or operation of utility (including, water, sewer, and electrical) and communication systems (including data processing cable and similar electronic equipment) that use existing rights of way, easements, distribution systems, and facilities. (If the work is covered under a Corps Nationwide Permit, CZM federal consistency review is required.) (Navy CATEX #35)
- b. Repair and in-kind replacement of underground utility lines (such as fiber optic, water, and electric lines).
- c. Utility line maintenance and repair including but not limited to maintenance and repair of sewer lines, steam lines, gas lines, fire mains, and water lines.
- d. Cleaning of storm drain inlets and swales.
- e. Repair and maintenance of existing piping under roads and under culverts.
- f. Maintenance and repair of aboveground storage tanks, underground storage tanks, and fuel lines.
- g. Cleaning, maintenance, repair, and replacement of the following facilities and devices when other State or Federal permits are not required:
 - i. Existing drainage facilities
 - ii. Stormwater management devices, and
 - iii. Water quality facilities and devices
- h. Retrofit and redesign of existing drainage facilities that use environmental site design to the maximum extent practicable.
- i. In-kind replacement, reconstruction, repair, and modification of existing lighting, guardrails, traffic and pedestrian signals, curbs and gutters, sidewalks and ramps, variable message signs, and Americans with Disabilities Act (ADA) compliant retrofits.
- j. Maintenance, repair, and replacement of existing railroad structures.

1.5 Military Operations and Training:

- a. Non-routine repair and renovation, and donation or other transfer of structures, vessels, aircraft, vehicles, landscapes, or other contributing elements of facilities listed or eligible for listing on the National Register of Historic Places. (Navy CATEX #22).
- b. Routine movement of mobile assets (such as ships, submarines, and aircraft, and ground assets for minor repair, overhaul, disposal, homeporting, home basing, temporary reassignments; and training, testing, or scientific research) where no new support facilities are required. (Navy CATEX #11)
- c. Temporary placement and use of simulated target fields (e.g., inert mines, simulated mines, passive hydrophones) in fresh, estuarine, and marine waters for the purpose of non-explosive military training exercises or research, development, testing, and evaluation (Navy CATEX #18);
- d. Routine movement, handling, and distribution of materials, including hazardous materials and hazardous wastes that are moved, handled, or distributed in accordance with all applicable state and federal regulations. (Navy CATEX #15)
- e. Military training conducted on or over non-military land or water areas, where such training is consistent with the type and tempo of existing non-military airspace, land, and water use (e.g., night compass training; forced marches along trails, roads, and highways; use of permanently established ranges; use of public waterways; use of civilian airfields). (Navy CATEX #24)

- f. Modernization (upgrade) of range and training areas, systems, and associated components (including, but not limited to, targets, lifters, and range control systems) that support current testing and training levels and requirements. Covered actions do not include those involving a substantial change in the type or tempo of operation, or the nature of the range (i.e., creating an impact area in an area where munitions had not been previously used). (Navy CATEX #47)
- g. Upland routine testing and evaluation of military equipment on a military reservation or an established range, restricted area, or operating area; similar in type, intensity, and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where Department of the Navy was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable standard operating procedures protective of the environment (Navy CATEX #43). Each training exercise has Standard operating procedures (SOPs) that are briefed prior to the exercise. The SOPs are meant to reduce impacts to surrounding communities and the environment. The training activities covered by Catex #43 and in this agreement would comply with all the applicable SOPs;
- h. Upland routine military training associated with transits, maneuvering, safety and engineering drills, replenishments, flight operations, and weapons systems conducted at the unit or minor exercise level; similar in type, intensity, and setting, including physical location and time of year, to other actions for which it has been determined, through NEPA analysis where DON was a lead or cooperating agency, that there are no significant impacts; and conducted in accordance with all applicable standard operating procedures protective of the environment (Navy CATEX #44). Each training exercise has SOPs that are briefed prior to the exercise. The SOPs are meant to reduce impacts to surrounding communities and the environment. The training activities covered by Catex #44 and in this agreement would comply with all the applicable SOPs.

1.6 Real Estate Actions

- a. Transfer of real property from DON to another military department or to another Federal agency. (Navy CATEX #25)
- b. Receipt of property from another Federal agency when there is no anticipated or proposed substantial change in land use. (Navy CATEX #26)
- c. Minor land acquisitions or disposals where anticipated or proposed land use is similar to existing land use and zoning, both in type and intensity. (Navy CATEX #27)
- d. Initial real estate in grants and out grants involving existing facilities or land with no significant change in use (e.g., leasing of federally owned or privately owned housing or office space; agricultural outleases). (Navy CATEX #29)
- e. Renewals and minor amendments of existing real estate grants for use of government-owned real property where no significant change in land use is anticipated. (Navy CATEX #30)
- f. Grants of license, easement, or similar arrangements for the use of existing rights-of-way or incidental easements complementing the use of existing rights-of-way for use by vehicles (not to include significant increases in vehicle loading); electrical, telephone, and other transmission and communication lines; water, wastewater, storm water, and irrigation pipelines, pumping stations, and facilities; and for similar utility and transportation uses. (Navy CATEX #32)

1.7 Miscellaneous

 Studies (such as archeological investigations, periodic sampling, and geotechnical studies) for utility projects that require excavation but do not exceed 5,000 square feet of land disturbance and does not include grubbing.

- b. Studies, data, and information gathering that involve no permanent physical change to the environment (e.g., topographic surveys, wetlands mapping, surveys for evaluating environmental damage, engineering efforts to support environmental analyses). (Navy CATEX #17)
- c. Installation and operation of passive scientific measurement devices (e.g., antennae, tide gauges, weighted hydrophones, salinity measurement devices, water quality measurement devices) where use will not result in changes in operations tempo and is consistent with applicable regulations. (Navy CATEX #19)
- d. Decommissioning, disposal, or transfer of naval vessels, aircraft, vehicles, and equipment when conducted in accordance with applicable regulations, including those regulations applying to removal of HMs. (Navy CATEX #21)

Section 2: Proposed Environmentally Beneficial Activities

The following list identifies the Navy's proposed environmentally beneficial activities. This list is not applicable to activities that require a federal authorization², such as a Nationwide Permit from the Corps. Additionally, for any of these activities occurring on state-owned aquatic lands, the Navy shall contact the DNR before any project is initiated.

2.1 Standalone low-impact development retrofit or enhancement activities.

- a. Low Impact Development is a stormwater and land-use management strategy that tries to mimic natural hydrologic conditions by emphasizing the following techniques. Low-impact development activities would be designed and maintained by MS4 permits and when applicable the Washington State Construction Stormwater Manual. Low-impact development activities include:
 - i. Replacement of impervious surface with permeable materials or any form of low impact development design methodologies pursuant to Washington State storm water and land-use management plans.
 - ii. Demolition, disposal, or improvement of structures or infrastructure that includes Ecology-approved sediment/erosion control measures and results in reduced impervious surface or increased ecosystem service providing vegetation.
 - iii. Construction and installation of native species grass swales and shrub or tree plantings.
 - iv. Installation, maintenance, repair, and replacement of rain barrels, dry wells, and cisterns to manage stormwater runoff from existing structures.

2.2 Installation of devices to protect human or animal life

 Includes raptor electrocution prevention devices, fencing to restrict wildlife movement onto airfields, fencing and grating to prevent accidental entry to hazardous areas (Navy CATEX #40). This does not include hard armoring.

2.3 Wetland enhancement

a. Wetland enhancement that does not involve excavation or clearing of forests, affect other highquality habitats, or create habitat for invasive species in reference to the Ecology and Corps mitigation guidance.

² <u>https://www.ecfr.gov/current/title-15/subtitle-B/chapter-IX/subchapter-B/part-930#subpart-D</u>

2.4 Culvert replacements

a. Culvert replacements without wetland impacts that restore or improve fish passage in accordance with Washington Department of Fish and Wildlife's Water Crossing Design Guidelines.

Section 3: Best Management Practices (BMPs)

Table 1 includes the BMPs that will be implemented for each activity, as applicable, to protect water quality, coastal uses, and coastal resources. BMPs are existing policies, federal and state laws or regulations, practices, and measures that the Navy would adopt to reduce the environmental impacts of designated activities, functions, or processes. BMPs mitigate potential adverse effects by avoiding, minimizing, or reducing/eliminating impacts.

Table 1. The Navy's Best Management Practices

| ВМР | Description | Impacts Reduced/Avoided |
|--|---|----------------------------|
| Water Quality Monitoring | The Navy will comply with water quality requirements imposed by Washington Department of Ecology (Chapter 173-201A Washington Administrative Code [WAC]). Monitoring for turbidity, pH, and all other applicable water quality standards will be conducted during in-water construction. | Water quality |
| Water Quality Monitoring and Protection | A Water Quality Monitoring Plan (WQMP) plan will be developed when any work will be occurring below the Ordinary High Water Mark or High Tide Line and during sediment disturbing activities. | Water quality |
| Anti-Degradation | Work will follow Anti-Degradation protocol to ensure in-water work is performed in compliance with the anti-degradation requirements of WAC 173-204-120 and the anti-degradation policy of the state of Washington as generally guided by chapters 90.48 and 90.54 RCW. Existing beneficial uses shall be maintained and protected and no further degradation which would interfere with or become injurious to existing beneficial uses shall be allowed. No degradation of existing sediment quality shall be allowed of waters constituting an | Sediment quality |

| ВМР | Description | Impacts Reduced/Avoided |
|--|--|----------------------------|
| | of national and state parks and scenic and recreation areas, wildlife refuges, and waters of exceptional recreational or ecological significance. | |
| | The Navy will follow an Environmental Protection Plan that identifies spill sources at the work site and outlines responsive actions in the event of a spill or release, as well as notification and reporting procedures. | |
| Environmental Protection Plan | The Environmental Protection Plan would include: Protection of Features Plan and Historical, Archaeological Cultural/Biological Resources and Wetlands Plan Maintenance of Hazardous Material Safety Data Sheet Manifesting Hazardous Waste Non-Hazardous Solid Waste Disposal Plan | Water quality |
| No discharge of unauthorized pollutants | No petroleum products, fresh cement, lime, fresh concrete, chemicals, or other toxic or harmful materials will be allowed to enter surface waters. Wash water resulting from washdown of equipment or work areas will be contained for proper disposal and will not be discharged unless authorized. Equipment that enters surface water will be maintained to prevent any visible sheen from petroleum products. There will be no discharge of oil, fuels, or chemicals to surface waters, or onto land where there is a potential for re-entry into surface waters. Fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc., will be checked regularly for leaks. Materials will be maintained and stored properly to prevent spills. | Water quality |

| ВМР | Description | Impacts Reduced/Avoided |
|--|---|---|
| | No cleaning chemicals or solvents will be discharged to ground or surface waters. | |
| Construction material storage | Construction materials will not be stored where high tides, wave action, or upland runoff could cause materials to enter surface waters. | Water quality |
| Restriction of barge operations | Barge operations will be restricted to tide elevations adequate to prevent grounding of a barge. | Benthic organisms and marine vegetation |
| General pile removal | Removed piles and associated sediments (if any) will be contained on a barge. If a barge is not utilized, piles and sediments will be stored in a containment area near the construction sites. Piles that break or are already broken below the waterline may be removed by wrapping the piles with a cable or chain and pulling them directly from the sediment with a crane (EPA 2016). | Water quality |
| Limits on changes to structure footprint | Overwater structure footprint changes would be less than two percent of the original overwater coverage of each structure (Navy 2019). Changes to overwater coverage would most likely occur from associated fender system structures or utility repairs, changes in building codes, or for safety reasons. | Protected species |
| Timing restrictions | In-water work would be conducted during work window when Endangered Species Act-listed salmonids are least likely to be present. Additionally, Washington Department of Fish & Wildlife fish windows will be considered, and the most restrictive in-water work window will apply (Table 2). | Protected species |
| Species monitoring and shutdown | A Marine Mammal Monitoring Plan and a Marbled Murrelet Monitoring Plan for each project will be developed when required for Marine Mammal Protection Act or Endangered Species Act consultation, and approved in coordination with the National Marine Fisheries Service and U.S. Fish and Wildlife Service. Should a marine mammal or marbled murrelet enter the shutdown zone, pile | Protected species |

| ВМР | Description | Impacts Reduced/Avoided |
|--|---|----------------------------|
| | driving will be immediately halted until the marine mammal or marbled murrelet has left the area. | |
| Minimization measures to protect eelgrass/kelp from vessel impacts | Where eelgrass is present in the work area, the Navy will provide the contractor with plan sheets showing eelgrass boundaries. Vessels shall not ground or anchor in native eelgrass (<i>Zostera</i> <i>marina</i>) or kelp (rooted/attached brown algae in the order Laminariales) and paths through native eelgrass or kelp shall not be established. If there is no other access to the site or cannot be met due to human safety considerations, a site-specific plan shall be developed describing specific measures and/or best management practices that will be undertaken to minimize negative effects to eelgrass and kelp from vessel operation and accessing the site. The access plan shall include the following components: (a) frequency of access at each location, (b) use of only the minimum number of boats and/or crew members needed to conduct the work and a description of the minimum number of boats and crewmembers needed at each visit, and (c) consistency in anchoring/grounding in the same location and/or walking on the same path to restrict eelgrass disturbance to a very small footprint. The following restrictions will apply to areas designated as having eelgrass: Construction barges will not ground in eelgrass beds. This will be accomplished by anchoring barges using spuds located outside of eelgrass beds or at depths greater -33 feet mean lower low water (MLLW) Shallow draft, lower horsepower tugboats will be used in the nearshore area and for extended operations in areas shallower than 40 feet below Mean Lower Low Water, where feasible. No scouring of sediments will occur within eelgrass beds. | Protected species |

| ВМР | Description | Impacts Reduced/Avoided | |
|--|---|-----------------------------|--|
| | Shading from construction vessels will be minimized to the time necessary to complete the work activities. | | |
| Acoustic Minimization Measures | Jetting or vibratory installation will be used to the extent possible to drive concrete or steel piles to minimize high sound pressure levels associated with impact pile driving. | | |
| | Sound attenuation measures (i.e. confined bubble curtain and/or unconfined bubble curtain) will be used during impact hammer operations. Operations that include acoustic impacts will comply with NMFS/USFWS requirements for pile driving days and number of impacts per day for all pile driving operations, impact and vibratory. These numbers shall not be exceeded. Acoustic monitoring would be conducted on a | Noise | |
| | subset of piles, if needed. Pile driving will be limited to occur between 7:00 a.m. and 10:00 p.m. However, the USFWS recommends pile driving limitations between 2 hours after sunrise and 2 hours before sunset for marbled murrelets during marbled murrelet nesting season (April 1 to September 23) (USFWS and NMFS 2017). | | |
| "Soft start" impact hammer operations | The Navy will utilize a "soft start" procedure to provide a warning and/or give animals in close proximity to pile driving the opportunity to leave the area prior to an impact driver operating at full capacity thereby exposing fewer animals to loud underwater and airborne sounds. A soft start procedure would be used for impact pile driving at the beginning of each day's in-water pile driving or any time pile driving has ceased for more than 30 minutes. | Protected species | |
| Revegetation | Class A noxious weeds surveyed and identified and eradicated in a timely manner. Ensure no communities of Class A Noxious Weeds are permitted to thrive on the | Invasive species control | |

| ВМР | Description | Impacts Reduced/Avoided |
|-----|---|-------------------------------------|
| | installations. | Native species & habitat Protection |
| | Actions include mulching, seeding, geotextile matting and netting, etc. | |

In-water work windows are timed to minimize the presence of juvenile salmonids. In-water work windows in the Puget Sound range between July 16 and February 15 depending on tidal reference area (Table 2). Impact pile driving is estimated to last a maximum duration of 4 hours per day or an average of 1.5 hours a day within the salmonid work window at any single or combination of the facilities listed in the table.

Table 2. In-Water Work Window by Tidal Reference (WAC 220-660-330) for Fish Protection for AllMarine/Estuarine Areas.

| Tidal Reference Area | State In- | Federal In- | Installation |
|----------------------|-------------|-------------|--|
| | Water Work | Water Work | |
| | Window | Window | |
| 13 | July 15 – | July 16- | NAVBASE Bangor and Zelatched Point |
| | January 15 | February 15 | |
| 5 | August 1 – | July 16- | NAVBASE Bremerton, Manchester, and Keyport |
| | February 15 | February 15 | |
| 7 | July 15 – | July 16- | NAVSTA Everett |
| | February 15 | February 15 | |
| 10 | July 15 – | July 16- | NAVMAG Indian Island |
| | January 15 | February 15 | |

Key: NAVBASE = Naval Base; NAVSTA = Naval Station; NAVMAG = Naval Magazine

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