US Army Corps of Engineers
Seattle District

Department of the Army Regional General Permit

Structures in Inland Marine Waters of Washington State

Permit Title: Regional General Permit 6 (RGP-6): Structures in Inland Marine Waters of Washington State

Effective Date: Original: April 20, 2017, Revision: April 20, 2018; February 12, 2020

Expiration Date: April 20, 2022

Authority: In accordance with 33 CFR 325.2(e)(2), the U.S. Army Corps of Engineers (Corps) is modifying and re-issuing Regional General Permit 6 (RGP-6) to authorize certain activities in or affecting waters of the U.S, including navigable waters of the U.S, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act (RHA) and Section 404 of the Clean Water Act (CWA).

Issuing Office: U.S. Army Corps of Engineers, Seattle District
Regulatory Branch
Post Office Box 3755
Seattle, Washington 98124-3755
Telephone: (206) 764-3495
Website: www.nws.usace.army.mil/

Purpose: The purpose of RGP-6 is to authorize the construction of new[1] residential in- and overwater structures in inland marine waters of Washington State through a streamlined permitting process that includes Section 7 Endangered Species Act (ESA) and Magnuson-Stevens Fishery Conservation and Management Act (MSA) essential fish habitat (EFH) consultation, provided impacts have been avoided, minimized and mitigated to the maximum extent possible form the purpose of providing residential waterfront access and recreational uses.

Activities Authorized by RGP-6: Work authorized by RGP-6 is limited to the installation of new residential in- and overwater structures in inland marine waters of Washington State. These structures include piers, ramps, floats, mooring buoys, marine rails, open-frame stairways, bluff-to-beach trams, and watercraft lifts. Applicants are limited to one overwater structure (i.e., a pier, ramp and float system) or marine railway plus one stairway or tram per property as necessary for water access. Construction of marinas, dolphins or commercial structures are not authorized by this RGP. Shared or "joint-use" structures are encouraged because they result in fewer impacts to the aquatic environment (they may also be more cost-effective for applicants). For the purpose of this RGP, "joint-use" means structures constructed and shared by more than one residential waterfront property owner or by a homeowners' association that owns waterfront property. The placement of fill material may also be authorized by this RGP.

Avoidance, Minimization and Compensatory Mitigation: The amount of compensatory mitigation will be calculated only after the Corps ensures that impacts from the project have been avoided and minimized. An example of avoidance is situating a pier as far as possible from eelgrass. An example of a minimization measure is fully grating a pier. Compensatory mitigation is required to reduce cumulative and individual

[1] For the purposes of RGP-6, "new" structures means those placed where there was previously none; this includes modifications to existing structures that expand the footprint (For example, if an existing pier is proposed to be extended 10 feet, the proposed 10 feet must meet all applicable Terms and Conditions of RGP-6 to be authorized by RGP-6).

impacts to the aquatic environment including ESA-listed species and habitat (see Appendix B).

Location of Authorized Activities: For the purposes of this RGP, inland marine waters are defined as tidally influenced waters within the State of Washington limited to the marine waters ranging from South Puget Sound and Hood Canal to and including the Strait of Juan de Fuca and the Strait of Georgia. This does not include the outer coast adjoining the Pacific Ocean or tidally influenced rivers (above river mile "zero") draining into these waters.

RGP-6 is not applicable in the following locations:

- Elliott Bay at Seattle. Elliott Bay extends from the tip of West Point in Discovery Park south to the tip of Alki Point in West Seattle.
- Sites in or within 300 feet of an existing or previously designated Superfund Site or a Washington State Model Toxic Control Act cleanup site.

Use of this RGP: To use RGP-6, a prospective permittee must apply to the Corps in accordance with the procedures herein. A proposed project is not authorized under this RGP, and work may not commence, until the Seattle District Engineer (DE) or their designee (i.e., Regulatory Project Manager) has issued written verification that the proposed project is authorized. The permittee is responsible for ensuring the authorized structures and construction activities comply with all terms and conditions of this RGP, including any project-specific special conditions that may be added by the DE. Failure to abide by the requirements of RGP-6 may constitute a violation of the RHA, CWA, ESA, MSA, National Historic Preservation Act (NHPA) and other relevant laws. For purposes of this RGP, the term "permittee" shall include all successors in interest. Projects that don't meet the requirements of RGP-6 are subject to a different permitting process as well as individual ESA and MSA consultation.

Agency and Tribal Notification and Review Process: Once a complete application package is received, it will be reviewed by a Corps Regulatory Project Manager to ensure appropriate avoidance, minimization and compensatory mitigation is proposed. The application package will then be emailed to the National Marine Fisheries Service (NMFS) to ensure ESA and MSA requirements are met. NMFS will have a 30 calendar day period to respond with comments. Concurrently, a brief project description, including compensatory mitigation and project drawings will be sent to each federally recognized Native American Tribe (which has notification procedures with the Corps) with an interest in the project area to solicit comments to meet the tribal trust responsibilities of the Federal Government.

Other Permits: Applicants must also obtain all local, State, and other Federal permits that apply to this project. Early coordination with the County, Washington Department of Fish and Wildlife (WDFW) and Washington's Department of Natural Resources (DNR) is strongly encouraged.

Compliance: A percentage of all structures and compensatory mitigation sites authorized by this RGP will be inspected for compliance annually.

Maintenance: Once work is authorized by this RGP, a Department of the Army (DA) Individual, Nationwide, or different regional permit must be obtained to authorize any proposed maintenance activities.

Resources to help Applicants: Assistance for applicants such as templates and information papers are located on the Seattle District Regulatory webpage at www.nws.usace.army.mil, select the Permit Guidebook, Chapter 2: Permitting, Section a.iv. Regional General Permits. Contact information for Regulatory Project Managers is also available (go to the "Contact Us" link on the Regulatory webpage). A list of resources and templates relevant to RGP-6 are listed in Appendix C: Glossary, of this document under "Application Resources" and are available on the Corps' Regulatory webpage.

Required Information for a Complete RGP-6 Application:

Mail completed application materials to:
U.S. Army Corps of Engineers, Seattle District, Regulatory Branch
Post Office Box 3755, Seattle, Washington 98124-3755

Hard copies of all application materials must be submitted and the additional submittal of an *electronic* copy of materials on a disc is strongly recommended.

1. **Project Description**: Submittal of a complete application constitutes the applicant's voluntary agreement to meet all of the terms and conditions of this RGP (General Conditions and Special Conditions Listed in Appendix A). A full project description must be contained on the *Joint Aquatic Resources Permit Application (JARPA)* or *Application Form ENG 4345*. The Governor's Office for Regulatory Innovation and Assistance has online (http://www.oria.wa.gov) and telephone assistance if you need help filling out your JARPA.

2. **Compensatory Mitigation Plan:** The *RGP-6 Compensatory Mitigation Calculator* located in Appendix B must be utilized to determine the amount of mitigation required. The 2008 Federal Mitigation Rule (33 CFR Parts 325 and 332) lists the required elements of a compensatory mitigation plan.

3. **Project/Mitigation Drawings:** All existing and proposed conditions must be depicted and drawings on 8 ½- by 11-inch paper, must include a north arrow, graphic scale, high tide line , mean high water, and limits of the Upper, Lower and Deeper Shore Zones (see Appendix B, Figure 1). Page 1 of your drawings should be a vicinity map, page 2 should show a plan view, page 3 should show a cross-sectional view and additional pages can be used if needed. Every page should have a Title Block with basic location and property owner information. For additional guidance see the "Drawing Checklist" on the Corps Regulatory website.

4. **Identification of important habitat including Special Aquatic Sites (40 CFR Part 230) in the project area and how impacts to these resources will be avoided and minimized:**

a. Forage Fish Spawning Beaches. *Forage fish provide a critical food web link in marine waters.* Photographs should be taken of the project area, bank and beach. Photographs should be taken at low tide and be zoomed in enough to show the substrate composition of the upper shore zone. To demonstrate avoidance and minimization , a survey for the most common forage fish (surf smelt, Pacific herring, sand lance) survey may be required if suitable habitat exists near where work is proposed.

b. Vegetated Shallows/Submerged Aquatic Vegetation. *Submerged aquatic vegetation [2](SAV) provides critical food sources and habitat for many marine species including forage fish. Eelgrass meadows and kelp forests in particular protect shorelines from wave damage, uptake carbon from the atmosphere and buffer the effects of ocean acidification.* Photographs of the Lower Shore Zone should be taken of the project area at low tide from June 1 through October 1 to most accurately reflect vegetation distribution. Include descriptions of the type and abundance of all seagrasses, kelp, macroalgae or other SAV located on the property where work is proposed. If installing a mooring buoy, underwater photographs should be taken that show at least a 25 foot diameter buffer around the location of the anchoring device. If the project area is located in areas with dense SAV or specifically native eelgrass (*Zostera marina*), a survey and delineation may be required to demonstrate how the project will avoid and minimize impacts. **On our webpage, see *RGP-6 Vegetation Scenario Guide and Examples Powerpoint* for step-by-step instructions on how to calculate Percent Cover as needed to utilize the Compensatory Mitigation Calculator.**

[2] For the purposes of this RGP, submerged aquatic vegetation is defined as rooted vascular plants and attached macroalgae.

c. Wetlands/Mud Flats. *Wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems*. Mud flats and freshwater or saltwater wetlands on the property where work is proposed must be identified on the project drawings. If wetlands will be impacted as part of the project, a wetland delineation must be submitted and wetland restoration and/or compensatory mitigation is required.

d. Riparian Zone. *Unaltered riparian (shoreline) areas with native vegetation are integral to the marine ecosystem. Healthy riparian zones capture sediment and contaminants and contribute nutrients and habitat structure (such as insects and large woody material to the aquatic environment.* Photographs should be taken of the existing (pre-construction) riparian zone which, for purposes of this RGP, is a zone the length of the property and 50 foot laterally from the high tide line. Please include a description the existing vegetation and the amount of impervious surface in the work strip where construction will occur.

5. **Joint-use applications must include the following:** Provide a *Joint-Use Agreement* signed by each property owner; this Agreement must state that each property owner voluntarily agrees to build no other in/overwater structures on their property except modification of the authorized structure. Upon issuance of the permit, all property owners must record the Agreement on their property deeds/titles (See General Condition 3).

6. **Cultural Resources.** For activities that may affect historic properties, listed or eligible for listing, in the National Register of Historic Places, the application must include a description of each historic property that may be affected by the proposed work and a map indicating the location of the property. The Corps will review each project individually under Section 106 of the NHPA and federally recognized Native American Tribes with an interest in the project area will be notified of each project so they can perform their own review for cultural resources. The applicant will be notified if a cultural resources survey or monitoring will be required.

Modification, Suspension, or Revocation of RGP-6: This RGP may be modified or suspended in whole or in part if the Secretary of the Army or his authorized representative determines the individual or cumulative impacts of work that would be authorized by RGP-6 are contrary to the public interest. The final decision whether to modify, suspend, or revoke this permit, in whole or in part, shall be made pursuant to procedures prescribed by the Chief of Engineers. Following such revocation, any future activities heretofore authorized by this RGP will require alternate DA authorization.

The authorization of an individual project under this RGP may also be summarily modified, suspended, or revoked, in whole or in part, if the permittee either fails to abide by the terms and conditions of this permit or provides information that proves to be false, incomplete, or inaccurate, or upon a finding by the DE or their designee that such action would be in the public interest. If a permittee's authorization is revoked, the permittee shall, upon notice of such revocation, without expense to the U.S and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former condition. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

Expiration of the RGP: This permit shall become effective on the date of the signature of the District Engineer or his/her authorized representative and will automatically expire 5 years from that date unless the permit is modified, revoked, or extended prior to that date. Activities that have commenced (i.e., are under construction) or are under contract to commence in reliance upon this permit will remain authorized provided that the activity is completed within one year of the date of this permit's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization.

Regional General Permit 6 (RGP-6)
General Conditions
Version: April 20, 2018

1. Reliance on Permittee's Information. In verifying a permittee's authorization under this RGP, the Department of the Army has relied, in part, on the information provided by the permittee. If this information proves to be false, incomplete, or inaccurate, the permittee's authorization may be modified, suspended, or revoked, in whole or in part. If the authorization is revoked, any work completed under the authorization must be removed, without expense to the U.S.

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the U.S knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

2. Compliance with Terms and Conditions. Projects authorized by RGP-6 shall comply with all terms and conditions contained herein. Failure to abide by these terms and conditions invalidates this authorization and may result in a violation of Federal law, which may require that the permittee restore the site, take other remedial action or could result in the assessment of criminal or civil penalties. Activities requiring Department of the Army (DA) authorization that are not specifically authorized by this RGP are prohibited unless authorized by another DA permit.

3. Deed Recording. If compensatory mitigation is required, a copy of the completed application, drawings, mitigation plan, and final authorization letter shall be recorded with the local government (Registrar of Deeds in the county or city of the project), within 60 calendar days of the date of the RGP-6 authorization, to ensure that subsequent property owners are aware of the permit and mitigation requirements. **If the overwater structure is joint-use**, all co-applicants must sign a *Joint-Use Agreement* to voluntarily agree to build no additional overwater structures on their property, except maintenance or modification of the proposed joint-use overwater structure. Maintenance is not covered by this RGP. This voluntary agreement and documentation must be recorded on the deeds of all involved property owners. Proof of recording of all applicable documents must be provided to the Corps within 65 calendar days after the date of the Corps' RGP verification letter to the permittee.

4. Washington State Coastal Zone Management Program (CZMP). On August 25, 2016, the Department of Ecology concurred with the Corps' determination that work authorized by RGP-6 is consistent with the CZMP.

5. Contractor/Consultant Copies/Compliance. The permittee shall provide complete copies of the Corps RGP-6 verification letter and approved permit drawings to all contractors and consultants performing the authorized work and keep copies available for inspection at the project site. If contractors or consultants have questions about conditions of a permit or jurisdictional limits, they should contact the Regulatory Project Manager listed in the verification letter before performing work. Project changes must be coordinated and approved by the Corps in advance of performing the work.

6. As-built Report. Every permittee shall submit to the Corps, within 30 days of completing the authorized work, certification that the work, including any required compensatory mitigation, was conducted in accordance with the provisions of this RGP, including project-specific Special Conditions. This requirement can be met with the submittal of a completed *As-Built Report* (template available on our webpage).

7. Access for Inspection. The permittee shall allow the DE or designee to inspect the project whenever deemed necessary to ensure the activity is in compliance with the terms and conditions prescribed herein.

8. Limits of Authorization. This permit does not:
   a. Obviate the requirement to obtain all other Federal, State, or local authorizations required by law for the activity authorized herein, including any authorization required from Congress.
   b. Convey any property rights, either in real estate or material, or any exclusive privileges.
   c. Authorize any injury to property, invasion of rights, or any infringement of Federal, State, or local laws or regulations.
   d. Authorize the interference with any existing or proposed Federal project.

9. Limits of Federal Liability. This permit is not an approval of the design features of any authorized project or an implication that such project is adequate for the intended purpose; a DA permit merely expresses the consent of the Federal Government to conduct the proposed work insofar as public rights are concerned. In issuing this RGP, the Federal Government does not assume any liability for the following:
   a. Design or construction deficiencies associated with the authorized work.
   b. Damages to the permitted project or uses thereof as a result of other permitted activities or from natural causes, such as flooding.
   c. Damages to persons, property, or to other permitted or unauthorized activities or structures caused by the activity authorized by this permit.
   d. Damages associated with any future modification, suspension, or revocation of this permit.
   e. The removal, relocation, or alteration of any structure or work in navigable waters of the U.S ordered by the Secretary of the Army or his authorized representative.
   f. Damage to the permitted project or uses thereof as a result of current or future activities undertaken by, or on behalf of, the U.S in the public interest.

10. Tribal Rights. No activity authorized by this RGP may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

11. State Owned Aquatic Lands. Projects proposed on state owned aquatic lands require approval from the Washington Department of Natural Resources (DNR) and if approved, will require a *Site Use Authorization*. Applicants should contact DNR's Aquatic Resources Division at (360) 902-1100 or via email at ard@dnr.wa.gov for more information. Their website is: www.dnr.wa.gov.

12. Stability. The permittee shall design projects to be stable against the forces of flowing water, wave action, and the wake of passing vessels.

13. Maintenance. The permittee shall properly maintain all authorized structures, including maintenance necessary to ensure public safety. RGP-6 does not cover any maintenance work. The applicant must submit a separate application to the Corps for future maintenance actions.

14. Marking Structures. The permittee shall install any lights, signals, or other appropriate markers necessary to clearly designate the location of structures or work that might pose a hazard to public safety. Permittees shall abide by U.S. Coast Guard requirements concerning the marking of structures and work in navigable waters of the U.S.

15. Endangered Species. This RGP requires that permittees avoid, minimize and compensate for effects to species listed or proposed under the Endangered Species Act (ESA). The Corps permit decision is considered a Federal action that must comply with the ESA. The ESA is administered by the NMFS and the USFWS. The ESA requires all Federal agencies to consult with NMFS and/or the USFWS pursuant to Section 7 of the ESA, on any action, or proposed action, permitted, funded, or undertaken by the agency that may affect a

species listed as threatened or endangered under the ESA, or its designated critical habitat. The Corps has determined that activities that would be authorized by this RGP may affect federally listed species. A Biological Opinion (BO) for RGP-6 was issued by the NMFS on September 13, 2016, and by the USFWS on January 20, 2017. Both BO's are available on the Corps' webpage.

16. Essential Fish Habitat. This RGP requires that permittees avoid, minimize and compensate for effects to essential fish habitat as defined under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (MSA). The MSA requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). The Corps has determined that issuance of this RGP may adversely affect EFH for federally managed fisheries in Washington waters. A Biological Opinion (BO) for RGP-6 was issued by the NMFS and includes a Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response. This BO is available on the Corps webpage.

17. Marine Mammal Protection Act. The Marine Mammal Protection Act (MMPA) defines "take" to mean "to hunt, harass, capture, or kill" any marine mammal or attempt to do so. This RGP does not include an Incidental Take Permit from the NMFS. *It is the applicant's responsibility to ensure that no "take" of marine mammals occurs as a result of the construction or operation of any work authorized by this RGP.*

18. Historic Properties and Cultural Resources. The permittee shall perform any work authorized by the Corps in accordance with Section 106 of the National Historic Preservation Act (NHPA) and Corps regulations and avoid impacts to the historic property until the DE or their designee verifies that the requirements of 33 CFR Part 325, Appendix C, have been satisfied. Historic properties include prehistoric and historic archeological sites, and areas or structures of cultural interest. An applicant or permittee must notify the Corps if a proposed activity may affect a potential historic property and shall not begin work that would impact the property until notified by the Corps that the requirements of the NHPA have been satisfied and that the activity is authorized. If a previously unknown historic property is encountered during work authorized by this RGP, the permittee shall immediately cease all ground disturbing activities in the immediate area and notify the Corps within one business day of discovery.

19. Water Quality Standards. All activities authorized herein that involve a discharge of dredged or fill material into waters of the U.S shall, at all times, remain consistent with all applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards, and management practices established pursuant to the Clean Water Act (P.L. 92-500; 86 Stat. 816) or pursuant to applicable State and local law.

Note: Boaters can help protect Puget Sound by using fixed or mobile pump-out stations to remove sewage from their holding tanks. To report spills call: 1-800-424-8802. A list of pump-out stations can be found on Ecology's website: http://www.ecy.wa.gov.

21. Section 401, Clean Water Act, Water Quality Certification. On August 24, 2016, the Washington Department of Ecology issued Water Quality Certification Order No. 13728 for work authorized by this RGP. This Order is available on the Corps website.

22. Soil Erosion and Sediment Controls. The permittee shall avoid removing vegetation and use appropriate erosion and sediment controls during all staging and construction activities. The permittee shall remove all installed manmade controls as soon as they are no longer needed to control erosion or sediment.

23. Equipment. During construction, the permittee shall place heavy equipment on removable mats, or take other appropriate measures to minimize disturbance to wetlands, native soil and woody vegetation. Work barges may not ground out at any time.

24. Aquatic Life Movements. The permittee shall avoid, minimize and mitigate impacts to avoid disrupting the necessary life-cycle movements and migration patterns of those species that require access to the waterbody.

25. Disposal of Excess Material. All construction debris and any other material not authorized by the Corps for permanent placement into waters of the U.S shall be disposed of in an upland location in a manner that precludes it from entering waters of the U.S.

26. Work in Navigable Waters of the U.S. The permittee understands and agrees that, if future operations by the U.S require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the U.S. Army Corps of Engineers (Corps), to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. If the permittee fails to comply with the direction of the Corps, the DE may restore the navigable capacity of the waterway, by contract or otherwise, and recover the cost thereof from the permittee.

27. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under USFWS regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act.

APPENDIX A
Regional General Permit 6 (RGP-6) Special Conditions
List of Requirements

Version: April 20, 2018

Please read all General and Special Conditions of RGP-6 carefully. You must meet all applicable conditions to qualify for RGP-6. For us to determine if your proposal meets all of the conditions of RGP-6, you must submit a permit application form (JARPA or ENG form), vicinity map, project and mitigation drawings/plans, photographs, surveys and any other documentation, as applicable. The special conditions are displayed in this list format to help you determine if your project meets the conditions of RGP-6. You are not required to submit this list as part of your permit application.

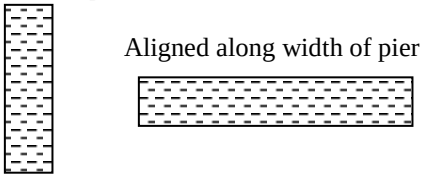
Hard copies of all application materials must be submitted and the additional submittal of an *electronic* copy of materials on a disc is strongly recommended.

Corps and Programmatic ESA Consultation Reference Numbers (NWS-2002-1291, RGP-6)
NMFS Reference Number: *WCR-2016-4361 for Puget Sound (PS) Chinook Salmon, PS Steelhead, Hood Canal summer-run chum, PS/Georgia Basin bocaccio, yelloweye rockfish, canary rockfish, Southern Resident killer whale.*
USFWS Reference Number: 01EWFW00-2016-F-0565 *for bull trout and Marbled murrelet*

	Special Conditions	Notes
	1. PIERS (a flat deck structure supported by piles) or LANDINGS and STEPS of a stairway	
	a. The width of the pier must not exceed 4 feet for single-use and 6 feet for joint-use.	
	b. Pier surfaces and stairway landings and steps must be entirely grated with either multi-directional grating with 40% open space or square grating with 60% open space.	
	c. The pier must be a straight line (finger "ell" or "T" shaped piers are <u>not</u> authorized by this RGP).	
	d. The construction of new structures on piers, (i.e., buildings, planter boxes, slides, etc.) are <u>not</u> authorized by this RGP except utility boxes.	
	e. Stairways must be open-frame construction and not a solid structures (i.e., concrete).	
	f. The width of stairway landings and steps must not exceed 4 feet for single-use and 6 feet for joint-use.	
	2. FLOATS (a flat deck structure supported by flotation devices)	
	a. For a **<u>single user</u>** structure, the float width must not exceed 8 feet and the length cannot exceed 30 feet. Functional grating must be installed on at least 50% of the surface area of the float.	
	b. For a **<u>joint-use</u>** structure, the float width must not exceed 8 feet and the length cannot exceed 60 feet for 2 users or 30 feet for each user (for example: for 3 users the length cannot exceed 90 feet). Functional grating must be installed on at least 50% of the surface area of the float.	
	c. Floats should be installed with the length of the float aligned in the north-south direction to the maximum extent	

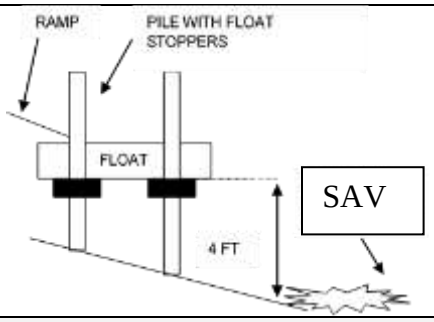
	practicable. Alternate configurations may be considered for joint-use structures to account for specific site constraints.	
	d. Floats may be held in place with lines anchored with a helical screw or "duckbill" embedded anchor, piles with stoppers and/or float support/stub piles. (1) For a **single-user** float, a maximum of 4 piles (not including stub piles) or embedded anchors may be installed. (2) For a **joint-use** float, a maximum of 8 piles (not including stub piles) or embedded anchors may be installed. (3) If embedded anchors need to be utilized, the anchor lines shall not rest on the substrate at any time; each must contain a mid-line float. (4) Only if the substrate prohibits use of piles or embedded anchors may a Corps-approved alternative be used. (5) If a concrete anchor or other Corps-approved alternative is needed to hold the float, calculations showing that it will hold without dragging or breaking during storm events are required. This analysis should include the size of the float and the dry weight and dimensions of the anchor.	
	e. Flotation for the structure must be fully enclosed and contained in a shell (tub) and only contain material suitable for the marine environment. The shell must prevent breakup or loss of the flotation material into the water.	
	f. Flotation shall be installed under the solid portions of the float, not under the grating (unless the entire float is grated).	
	g. If the float is positioned perpendicular to the ramp, a small access float may be installed to accommodate tidal movement of the ramp. The access float cannot be larger than 6 feet wide and 10 feet long.	
	h. No floats may be installed in the Upper Shore Zone (area landward of +5 MLLW).	
	3. FLOAT STOPS	
	a. To suspend the float above the substrate at all tides, float stops should be installed on piles anchoring floats. This method is preferred over 3b and 3c because float stops are less impacting to the marine environment.	
	b. If float stops attached to piles are not feasible (provide explanation) then up to four 10-inch diameter stub piles may be installed.	
	c. Float "feet" attached to the float are an option if the substrate consists of coarse material as described in the column to the right.	(1) In coarse substrate, D25[3] of 25 mm or larger for a grain size sample taken from upper 1 foot of substrate (2) For elevations of -3 feet MHHW and lower at D25 of 4 mm or larger for a grain size sample taken from upper 1 foot of substrate (to exclude installing float feet in muck)
	4. RAMPS (a sloped deck structure typically connecting a pier and a float)	
	a. The width of the ramp cannot exceed 4 feet.	

[3] "D25 of 25mm" means that 25% of the substrate has a grain size of 25 mm or less.

	b. Ramps must be fully grated with either multi-directional grating with 40% open space or square grating with 60% open space.	
	5. MARINE RAILS	
	RGP-6 authorizes either a marine rail at least 20 feet long or an overwater structure, but not both. Support marine rails with as few piles as practicable.	
	6. GRATING	
	a. Grating must not be covered (on the surface or underneath) with any items (e.g., kayaks, planters, sheds, lawn chairs, etc.) except utility boxes.	
	b. The grating must be either multi-directional grating with a minimum of 40% open space or square grating with a minimum of 60% open space. Provide documentation to show amount of % open area.	
	c. Grating openings should be oriented lengthwise in the east-west direction to the maximum extent practicable. See diagrams showing orientation of the grated openings.	North ↑  Aligned along width of pier Aligned along the length of the pier
	7.1 PILES AND/OR FILL	
	a. Proposed new piles may be steel, concrete, plastic, untreated wood or wood treated with approved wood preservatives per Section 8 of this document.	
	b. Piles supporting a new pier must be spaced no closer than 20 feet apart.	
	c. A maximum of 2 moorage piles may be installed to accommodate the moorage of boats exceeding the length of the floats.	
	d. Any piles subject to abrasion must incorporate design features to minimize contact between all of the different components of overwater structures during all tidal elevations.	
	e. For anchoring of tram cables or footings for stairs: No more than one cubic yard of fill can be used for each footing or anchor. The number and size of footings and anchors must be minimized. Forms must be removed after concrete has cured.	
	7.2 PILE DRIVING	
	a. Vibratory or impact hammer installation of wood, concrete, plastic, or other non-metal piles of any size is allowed under this RGP. However, the smallest diameter and number of piles required to construct a safe structure should be proposed and appropriate pile driving methods employed to minimize underwater sound.	
	b. Pile driving must occur during daylight hours only, for a maximum of 12 hours per day.	

	c. Requirements for steel piling: 1) Impact installation or proofing of steel piles is only allowed for steel piles up to 12 inches in diameter and when the number of pile strikes does not exceed 300 per day. The number of steel piles is limited to 20 or less and the installation must occur in 20 days or less. 2) Vibratory installation with impact proofing where the number of impact strikes will not exceed 300 per day is allowed.	
	d. If Southern Resident Killer Whales (SRKW) (an ESA-listed species) have been documented more than four times a month in any month during the proposed work window (typically June – February) in the quadrant the project area is located in, a *Marine Mammal Monitoring Plan* (MMMP) must be prepared and submitted with this application. This information will be reviewed by a NMFS biologist.	A monitoring plan must be submitted to Corps. Guidance for developing an MMMP can be found on NOAA's website: http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/monitoring_plan_guidance.html NOAA's website identifies these quadrants and contains guidance on the potential for ESA-listed marine mammal occurrences in project areas: http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/evaluating_sound.html
	e. If in one or both of the previous two years there were four or more Humpback whale sightings during the month you propose to work in, in the Puget Sound Sub-basin where pile driving will occur, a MMMP must be submitted. Check the Orca Network Sightings Maps at: http://www.orcanetwork.org/Archives/index.php?categories_file=Sightings%20Archives%20Home for Humpback whale sightings.	Contact NMFS for assistance making this determination. If NMFS determines a monitoring plan is required, it must be submitted to Corps. To determine the PS Sub-basin your project is in, please see the PS Sub-basin maps on the Corps webpage.
	f. All pile driving must cease immediately if any marine mammal is within 300 feet of the project, and shall only continue once the animal is beyond 300 feet.	
	g. When installing piles larger than 6 inches in diameter, to stay below the noise threshold, the number of strikes per day is limited to 300 and sound attenuation devices must include: (1) Placement of a block of wood (minimum 6 inches thick) between the hammer and the pile, and; (2) Use of bubble curtain that distributes air around 100% of the perimeter of the pile. The curtain must be designed/operated so that bubbles originate from the bottom and flow at all times during impact pile driving.	
	h. Piles larger than 12 inches in diameter may be allowed on a case-by-case basis when using alternative designs or materials (i.e., double walled piles). Provide details on design or materials to show they will achieve more than 10 decibel sound attenuation so that the 183 decibel Sound Exposure Level is not exceeded.	An explanation of how the work will meet sound thresholds must be in the permit application.

	8. TREATED WOOD	
	The only treated wood allowed is ammoniacal copper zinc arsenate (ACZA). However, ACZA piles may **not** be used in forage fish spawning habitat or on State-owned lands.	Wood treatment should be certified by an independent third party to have been produced in accordance with the most current EPA/Ecology regulations.
	9. WATERCRAFT/LIFTS AND GRIDS	
	a. A description of the watercraft to be moored at the overwater structures must be provided.	
	b. Watercraft may not rest on the tidal substrate at any time.	
	c. Up to two watercraft lifts may be installed at a single-user overwater structure and up to four may be installed at a joint-use structure.	
	d. A maximum of 4 additional piles may be used for watercraft lift/grids.	
	10. MOORING BUOYS	
	a. Only one mooring buoy per property may be authorized by this RGP.	
	b. The location (latitude/longitude) of the anchor for the buoy must be identified on the project drawings.	
	c. Anchor lines must not rest or drag on the substrate. A mid-line float must be installed to prevent this.	
	d. Anchors should be helical screw or another type of embedded anchor. Only if the substrate prohibits use of embedded anchors may a Corps-approved alternative anchor (i.e., concrete block) be used.	If an embedded anchor is not used, you must submit a written explanation why site conditions do not support it.
	e. If an embedded anchor cannot be used and a concrete anchor is needed, calculations showing that the anchor will hold without dragging/breaking during storm events is required. This analysis should include the size of the vessel and the dry weight/dimensions of the anchor.	
	f. No other moorage structures (except those authorized by this RGP) may be anchored within a 117 foot radius (with the proposed buoy in the center of the 117-foot radius circle, which would result in a concentration of no more than one per acre) of the proposed buoy. Note: This requirement can be waived by the District Engineer. Mooring structures include buoys, piers, floats, and boatlifts.	Show all existing buoys within a 250 foot radius of the proposed buoy on the project drawings.
	g. New mooring buoys may not be installed in any waterbody the Washington State Department of Health has designated as "threatened" or "closed" to shellfish harvesting due to the number of boats moored there.	The Corps will publish a list of closed waterbodies in a *Special Public Notice* (posted on our website) as they are added or removed from this list.
	h. Mooring buoys must be permanently marked with the Corps reference number in print large enough to be read from a distance of 20 feet.	
	Note: Many of our tidelands are owned by the State of Washington. Contact your DNR Aquatic District Land Manager to see how you can obtain DNR approval for a mooring buoy. A map can be found on http://www/dnr.wa.gov/ (search for "Aquatic Districts"). Buoys must be installed in accordance with marking and lighting requirements of the U.S. Coast Guard (33 CFR 330.5(a)(1)).	
	11. SUBMERGED AQUATIC VEGETATION (SAV) SAV is defined as rooted vascular plants and attached macroalgae.	
	a. The applicant must submit a SAV delineation for the project area within 25 feet of proposed structures. If SAV or marine plants are found within that area then you must	

	delineate the entire property to demonstrate avoidance and minimization.	
	b. If overwater structures will be installed less than 25 feet away from SAV, the applicant must clearly demonstrate that there are no other practicable locations for the structures.	
	c. If SAV is present within 25-feet of the proposed float, the bottom side of the float must be elevated at least 4 feet above the substrate at low tide to reduce prop scour impacts on SAV.	
	12. FORAGE FISH (Pacific Herring, surf smelt, and sand lance) SPAWNING HABITAT	
	a. If there is documented forage fish spawning habitat in the project area, you must show the extent of this habitat on a project drawing.	Maps of ***documented*** forage fish spawning habitat can be found online at WDFW's Forage Fish Spawning Map online: http://wdfw.maps.arcgis.com/home/webmap/viewer.html?webmap=19b8f74e2d41470cbd80b1af8dedd6b3&extent=-126.1368,45.6684,-119.6494,49.0781
	b. If there is **no** documented forage fish spawning habitat in the project area but there is documented forage fish habitat within one mile of the area, you must evaluate the substrate to see if ***potential*** forage fish spawning habitat exists in the project area. If it does, you must show the extent of this habitat on a project drawing.	See Appendix C, Glossary for a description of ***potential*** forage fish spawning habitat in terms of elevation range and substrate size and type.
	c. If there is no alternative to constructing piers and ramps over forage fish documented or potential sand lance or surf smelt spawning habitat, the structures should span at least 40 feet in the Upper Shore Zone over the habitat to minimize the number of piles in the habitat. With piers meeting the RGP-6 size and full grating requirements, there is no mitigation required for piers spanning forage fish habitat with spans averaging at least 40 feet in the Upper Shore Zone.	Additional mitigation may be required for spans less than 40 feet in the Upper Shore Zone.
	d. For impacts from floats in herring documented or potential spawning habitat in the Lower Shore Zone, **50% more mitigation is required** (see Appendix B)**.**	
	13. WORK WINDOWS	
	a. The work will be conducted during the Corps-required in-water work window. Please refer to *Marine Water Work Windows* on the Corps website.	Work windows in the Hydraulic Project Approval issued by WDFW may be different than Corps-required work windows. If this is the case, combine the work windows and use the most restrictive timeframe.

	b. If there is documented forage fish spawning habitat at the project site and there is no approved work window for forage fish prior to construction, the applicant must have a qualified biologist approved by WDFW's science staff confirm, in writing, that no forage fish are spawning in the project area during the proposed construction. If the Corps confirms the biologist's assessment, the permittee has 48 hours to begin work and 2 weeks from the date of inspection to complete all work in the intertidal zone.	WDFW maintains a list of qualified biologists on their website.
	c. The following work window restriction is in place whenever steel piles will be driven or proofed with an impact hammer: All pile driving operations are only authorized to occur between 2 hours after sunrise and 2 hours before sunset during Marbled murrelet nesting season (April 1 to September 15).	
	14. WORK IN THE DRY	
	To minimize turbidity and maintain water quality, work that involves excavation or fill in the substrate, beach, bank, or upper shore zone shall occur in the dry or at low tide to the maximum extent.	Please review Ecology's Water Quality Certification for RGP-6 on the Corps' webpage. Exceedances of water quality standards are not authorized.
	15. OPERATION OF EQUIPMENT	
	a. Use of equipment on the beach shall be held to a minimum, confined to a single access point, and limited to a 12-foot work corridor on either side of the proposed work. Equipment should be operated from the top of the bank, on a temporary work platform, barge, or similar out-of-water location.	
	b. Equipment shall be operated in a way that minimizes turbidity and meets State water quality standards.	
	c. Barges may not ground out at any time. Spud barges can be used if there is the possibility of grounding.	
	d. Any disturbance of the beach areas, waterward of the high tide line shall be restored immediately upon completion of construction and mitigation work.	
	16. MINIMAL DISTURBANCE OF RIPARIAN ZONE	
	a. Existing habitat features (e.g., vegetation, large wood) shall be retained to the extent possible to avoid causing erosion and to maintain food sources, shading and other ecological functions important to water quality and aquatic species.	
	b. Disturbance of bank vegetation shall be limited to a 12-foot work corridor on either side of the proposed work.	
	c. The applicant must include in the project description in the permit application if woody vegetation with a diameter at breast height (DBH) of 4 inches or greater needs to be removed to construct the project.	
	d. Trees that must be removed should be re-installed along the shoreline as downed habitat features where possible. Any anchors for securing large wood should be buried.	
	e. Disturbed bank vegetation shall be replaced with native species appropriate for the site. A Planting Plan must be	

	provided and approved by the Corps. Plantings must be installed during the appropriate time of year and within one year of construction. A re-planting Plan must be submitted, if applicable.	
	f. Vegetation on the face of the bluff should be avoided and not be removed, trimmed or altered. If there is no alternative but to impact vegetation on the face of the bluff, it should be done so in accordance with a slope stability plan/report. If vegetation is cleared, mitigation will be determined on a case-by-case basis based on the type and amount of vegetation removed or altered. An engineering Slope Stability Report must be submitted, if applicable.	
	17. MITIGATION	
	a. Applicant must utilize the most current Appendix B or Mitigation Calculator (worksheet or Tool) and submit drawings clearly showing mitigation work and location and, if applicable, submit a mitigation plan.	
	b. The amount of Mitigation Points required and proposed must be included in the project description of the permit application. See Appendix B, Table 2 for amount of mitigation points required and Table 3 for points for different mitigation options.	
	c. The permittee must comply with all requirements detailed on Appendix B, Table 3 for selected Mitigation Options.	
	18. SKIRTING	
	Skirting on any portion of an overwater structure is <u>not</u> authorized by this RGP.	
	19. LIGHTING	
	Artificial lighting of the marine environment should be minimized to the extent possible. If lighting is proposed, it should be included on the project drawings and will be included in the review process. Include lighting scheme on drawings, if applicable.	

APPENDIX B: Compensatory Mitigation Calculator

RGP-6: Structures in Inland Marine Waters of Washington State

Version: April 20, 2018

Formulas and calculations in this Appendix may be revised based on the best available science and additional formulas may be added to improve consistency and to reduce the need for case-by-case analysis of mitigation options. Check the Corps' webpage for the most current version of this Appendix.

Avoidance, Minimization and Compensatory Mitigation. *Before proposing compensatory mitigation, the applicant must first demonstrate that impacts to waters of the U.S., including special aquatic sites have been avoided then minimized (in that order) to the maximum extent possible.* To calculate compensatory mitigation requirements, follow these steps:

Step 1: Review Figure 1 below and ensure your permit application drawings clearly show each of the four zones (Riparian, Upper Shore, Lower Shore, and Deeper Shore Zone) in relation to the proposed structures.

Step 2: Review Table 1 (Vegetation Scenario) before filling out Table 2 (Mitigation Calculations) which will provide the total number of mitigation points required for the project. Refer to the *RGP-6 Vegetation Scenario Guide and Examples Powerpoint* on the Corps' webpage for assistance with understanding the Vegetation Scenarios and calculations and examples are also included.

Step 3: Submit a Compensatory Mitigation Plan (Plan). The Plan can include multiple available mitigation options listed in Table 3 (Mitigation Options). The details of the Plan are commensurate with the complexity of the proposal.

Note: No "credit" is given for mitigation activities exceeding the required amount of mitigation. "Excess" mitigation cannot be transferred, traded, banked, or saved.

Figure 1. Graphic Depiction of Shoreline Zones.

a. Upper Shore Zone (USZ) is the area landward of +5 MLLW
b. Lower Shore Zone (LSZ) is the area waterward of +5 MLLW and landward of -10 MLLW, or lowest elevation of SAV.
c. Deep Shore Zone (DSZ) is the area that begins waterward of where the LSZ ends and extends to 98 feet below MLLW. If SAV extends to -98 feet below MLLW, the LSZ would extend to that point and there would be no DSZ.

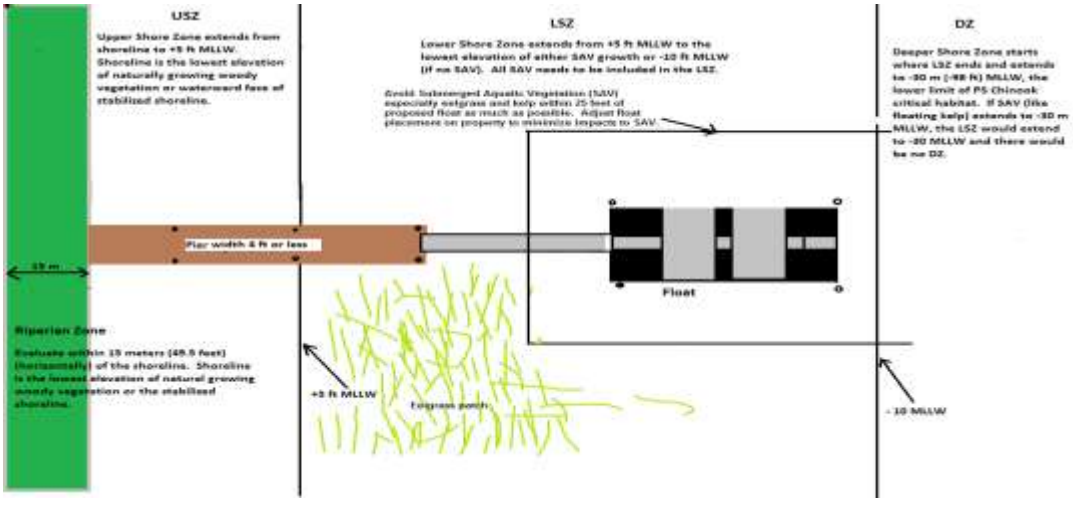


Table 1. Use this table to determine the Vegetation Scenario for the area within 25 feet of the proposed project in the Lower Shore Zone. Refer to the *RGP-6 Vegetation Scenario Guide and Examples Powerpoint* on the Corps' webpage for assistance with the calculations and examples.

Native Eelgrass and/or Kelp	**Vegetation Present but *not* Native Eelgrass and/or Kelp**	**Vegetation Scenario (circle Scenario in LSZ to help you complete Table 2)**
Use this column for areas where native eelgrass (*Zostera marina*) and/or kelp occur within 25 feet of proposed project. For example: 5% of area covered by native eelgrass and 15% by other SAV– Vegetation Scenario 1.	Use this column to determine vegetation scenario for areas where no native eelgrass and/or kelp occur.	
Does not apply if any native eelgrass or kelp present.	≤10%	0
1-25% combined SAV coverage	11% –25%	1
26-69% combined SAV coverage	26% –75%	2
≥70% combined SAV coverage	>75%	3

Submerged Aquatic Vegetation (SAV) is defined as rooted vascular plants and attached macroalgae. Drift algae, *Ulva* spp, and *Z. japonica* are not included when determining cover percentage. However, *Ulva* spp would be included if it occurs in documented herring spawning areas.

For the purposed of this RGP, kelp is defined as rooted/attached brown algae in the order *Laminariales*.

Table 2. Mitigation Calculations. This table is based on NMFS' characterization of adverse impacts from overwater structures on salmonid habitat in Puget Sound utilizing the Habitat Equivalency Analysis methodology. **Use the *Mitigation Tool* (on the Corps' webpage) which will help you to complete the calculations automatically.**

HABITAT ZONES AND CALCULATIONS OF IMPACTS TO DETERMINE MITIGATION AMOUNTS			**MITIGATION POINTS (MPs)**
Riparian Zone Impacts (From the high tide line to 50 feet landward of the high tide line)			
If woody vegetation with a diameter at breast height (DBH) of 4 inches or greater in the riparian work strip needs to be permanently cleared for access to the overwater structure:	Add 1.45 MPs per 100 square feet for removal of woody vegetation. See glossary for definition of "work strip". Note: The area calculation of removal area refers to aerial coverage (i.e., shadow cast on ground below the tree and shrub cover).		_____ MP
Upper Shore Zone (USZ) Impacts (From the high tide line to +5 feet MLLW)			
For any vegetation scenario: if the width of the fully grated pier is ≤ 4 feet for single use or ≤ 6-feet for joint-use, no mitigation points are required. If wider piers are necessary for ADA requirements, contact Corps for different calculations.	No calculations necessary for this section.		**0** MP
If piling will be driven and are closer than 40 feet apart (on average) in documented or potential surf smelt and/or sand lance spawning habitat in the Upper Shore Zone), contact the Corps for mitigation requirements.			_____ MP
Lower Shore Zone (LSZ) Impacts (Lower than +5 feet MLLW to -10 feet MLLW and limits of SAV)			
Pier and Piles			
For vegetation scenarios 0-2, if the pier is fully grated and width is ≤ 4 feet for single use or ≤ 6 feet for joint-use, no mitigation points are required:	No calculations necessary for this section.		**0** MP
For vegetation scenario 3, if the pier is fully grated and width is ≤ 4 feet for single use or ≤ 6 feet for joint-use, insert the square footage and complete the formula:	$\left[1 \times \frac{\text{s.f.}}{100}\right] + 0.2 =$ _____ MP		_____ MP
Floats and Floating Watercraft Lifts			
Insert the square feet of float(s) (outside dimensions including open and grated areas) into the formula, including access float and piles, located in the LSZ where the float is at least 50% grated with 60% open space and there are 8 or less piles. Upon completion of your survey/delineation, see Table 1 for the Vegetation Scenario Table and choose appropriate option.	Vegetation Scenario 0	$\left[3.5 \times \frac{\text{s.f.}}{100}\right] + 7.2$	_____ MP
	Vegetation Scenario 1	$\left[4.8 \times \frac{\text{s.f.}}{100}\right] + 8.9$	_____ MP
	Vegetation Scenario 2	$\left[6.1 \times \frac{\text{s.f.}}{100}\right] + 10.6$	_____ MP
	Vegetation Scenario 3	$\left[7.4 \times \frac{\text{s.f.}}{100}\right] + 12.3$	_____ MP

Floating watercraft lifts			
Insert the square feet of floating watercraft lifts (pontoons only) located in LSZ and complete the calculations in the formula.	Vegetation Scenario 0	$\left\lceil 2.2 \times \frac{\text{s.f.}}{100} \right\rceil + 2.7$	_____ MP
	Vegetation Scenario 1	$\left\lceil 3.5 \times \frac{\text{s.f.}}{100} \right\rceil + 4.5$	_____ MP
	Vegetation Scenario 2	$\left\lceil 4.9 \times \frac{\text{s.f.}}{100} \right\rceil + 6.2$	_____ MP
	Vegetation Scenario 3	$\left\lceil 6.3 \times \frac{\text{s.f.}}{100} \right\rceil + 7.9$	_____ MP
Subtotal (Pier and Piles + Floats) for LSZ			_____ MP
If the project is located within documented or potential herring spawning habitat, multiply subtotal by 1.5.			_____ MP
Deeper Shore Zone (DSZ) Impacts (Deeper than -10-feet MLLW or outer limits of SAV)			
Insert the square footage of floats located in the DSZ and complete the calculations in the formula.		$\left\lceil 1.8 \times \frac{\text{s.f.}}{100} \right\rceil + 1.4$	_____ MP
SUB-TOTAL NUMBER OF MITIGATION POINTS (Add up the Total MP for <u>all</u> Zones including forage fish spawning factors): _____ MP			
Debiting Factors for Environmental Conditions (See the glossary for more information on these topics)			
Multiply the subtotal above by 1.5 if the project is located in any of the following locations: a) within a pocket estuary, bluff- backed beach, or pocket beach b) within a Major Estuary Zone (see Appendix C, Glossary for definition; see Corps webpage for maps showing zones)			_____ MP
(SUB-TOTAL WITH DEBITING FACTORS)			
TOTAL REQUIRED MITIGATION POINTS:			_____ **MP**

Table 3. Mitigation Options. To compensate for the impacts of your project, you must implement any combination of the following mitigation options to total the amount of mitigation points calculated in Table 2 for your project. The selected mitigation options must be fully discussed in a Compensatory Mitigation Plan or in the permit application. Note: The amount of Mitigation Points for each option (particularly the ones listed as case-by-case) may be updated or revised as methodologies and the best available science changes to provide greater consistency and predictability for applicants. **Refer to most current version of Appendix B on the Corps' webpage for the most current listing of Mitigation Points.**

Mitigation Points (MP)	Descriptions of Mitigation Options
0.35 MP per 100 SF of planted native woody vegetation directly behind existing shoreline stabilization within 10 feet (horizontally) of the high tide line 0.7 MP per 100 SF of planted native woody vegetation within 50 feet (horizontally) of the high tide line where there is fully functioning shoreline	Plant native trees and shrubs landward of the high tide line where there previously was invasive vegetation, lawn, or impervious surface. No structures such as sheds or boathouses may separate vegetation from the water. All planted native woody vegetation needs to remain in their natural state for the life of the permitted overwater structure. A site protection mechanism must be placed on planted area. See glossary for a description of site protection mechanisms. The permit and mitigation planting area must be recorded on the deed. As-built drawings must be submitted upon installation of the mitigation (and within one year of construction), or a status report should be submitted instead (temporal loss may increase the amount of mitigation required). Vegetation establishment needs to be maintained and monitored and reports must be submitted to the Corps annually for 5 years [for emergent and scrub/shrub systems and for monitoring years 1, 3, 5, 7, and 10 for forested systems]. See Corps' *Riparian Planting Mitigation Plan Requirements* on the Corps' webpage and incorporate these requirements into your Mitigation Plan.
7.2 MP 10 MP if area is (<u>one</u> of the following): • adjacent to existing forage fish spawning habitat • located in a pocket estuary or beach	Install large woody material (LWM) in a 2000 square foot* area of the USZ and LWM needs to remain in place for the life of the permitted overwater structure. This may require buried anchors. * This area requirement may be reduced if the applicant can demonstrate that the proposed location and spacing of LWM mimics historic conditions at that specific location and it restores and/or protects 2000 sf of the Upper Shore Zone. The applicant should coordinate with WDFW or NMFS to reconstruct natural conditions of LWM at the project location. The total number of pieces of large wood should be coordinated with a biologist familiar with the ecology of the area. Once completed, the permittee must submit to the Corps, before and after photographs of the placement area.
MP determined on a case-by-case basis depending on the area; contact Corps for calculation	Placement of oyster shells over areas where it would benefit native oysters. This option may only be available in areas WDFW has designated as suitable for enhancement or restoration of native oyster habitat. The mitigation site should be researched to ensure that the appropriate material is proposed and that site conditions are suitable. See: (http://www.restorationfund.org/sites/default/files/olympia_oyster_restoration_plan_final.pdf). It must be shown that this mitigation option is suitable and would provide an ecological lift. The source, type and size of shell must be specified in the Mitigation Plan as well as the elevations where the material will be placed.

	Once completed, the permittee must submit to the Corps, before and after photographs of the placement area and/or receipts proving purchase and placement of the shells.
MP determined on a case-by-case basis depending on the area; contact Corps for calculation	Placement of sand and gravel over areas where down-cutting of the beach profile has been documented. It must be shown that this mitigation option is suitable and would provide an ecological lift to the mitigation site. (Note: This mitigation option would typically be applicable if WDFW requires the placement of material on the beach as a requirement of their Hydraulic Project Approval.) The source, type and size of gravel must be specified in the Mitigation Plan as well as the elevations where the material will be placed. The mitigation site should be researched to ensure that the appropriate material is proposed. This option may require multiple years of beach nourishment to be effective. Once completed, the permittee must submit to the Corps, before and after photographs of the placement area and/or receipts proving the purchase and placement of the gravel.
0.1 MP per 100 SF	Permanently prevent an existing float, that currently grounds out, from resting on the tidal substrate (must be elevated *at least 1 foot* above the tidal substrate). This must be clearly shown on project drawings and clearly described in the permit application.
0.2 MP per 100 SF	Permanently prevent an existing float, that currently grounds out, from resting on the tidal substrate (must be elevated *at least 3 feet* above the tidal substrate). This must be clearly shown on project drawings and clearly described in the permit application.
0.5 MP per pile	Remove non-treated wood, ACZA, concrete, plastic, or steel piles located in the tidal substrate (if the pile is creosote-treated wood, use MMO #4 instead). This option will require before and after photographs and a map showing the location of the piles to be removed.
1 MP per pile	Remove creosote-treated wood piles located in the tidal substrate. Guidance on disposal of treated wood can be found on the Department of Ecology's' website. If stub, short, or broken piles (typically less than 3 feet in height above the substrate) are removed, only 0.5 MP per pile will be credited. Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location of the piles to be removed/pile removal area.
1 MP per 0.4 cubic yard (10 cubic feet)	Remove creosote-treated wood (non-piles). For example, removal of a marine railway constructed of creosote timbers or creosote wood debris would be included in this category.
MP determined on a case-by-case basis depending on the age, type, and location of structure; contact Corps for calculation	Remove part or all of an existing overwater structure. Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location and length and width of the structure to be removed/removal area.
0.8 MP per linear foot removed and planted 1.2 MP per linear foot removed and planted if the removed structure was (<u>one</u> of the following): • adjacent to existing forage fish spawning habitat • located in a pocket estuary or beach	Completely remove hardened bank stabilization and plant at least a 10-foot wide buffer along the shoreline with native vegetation (must meet *Riparian Planting Mitigation Requirements* (located on our website). If removal of the bank stabilization results in restoring a sediment source (i.e., a bluff backed beach, etc.) plantings in the footprint and/or top of the bluff should be considered. However, if plantings are not appropriate, then full mitigation credit may be applicable. Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location and length and width of the structure to be removed/removal area. WDFW's Marine Shoreline Design Guidelines Publication provides a great deal of information on various marine shoreline design techniques and alternatives. It can be found on their website at:

1.7 MP per linear foot removed and planted if two of the above bulleted items were met	http://wdfw.wa.gov/publications/01583/. Please contact the Corps for applicable mitigation points for partially removing hardened bank stabilization and partial replanting of riparian.
3 MP per 100 SF 4.5 MP per 100 SF removed if the area was (one of the following): • adjacent to existing forage fish spawning habitat • located in a pocket estuary or beach 6.8 MP per 100 SF removed if two of the above bulleted items were met	Remove an entire or portion of an existing manmade groin. Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location and length and width of the structure to be removed/removal area.
MP determined on a case-by-case basis depending on the area; contact Corps for calculation	Complete or partial removal of hardened bank stabilization and in its place a pocket beach is constructed. Example designs can be found on King County and Kitsap County websites. Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location and length and width of the structure to be removed/removal area.
MP determined on a case-by-case basis depending on the size of the ramp and type of habitat opened up; contact Corps for calculation	Remove an entire or portion of an existing boat ramp. Once completed, the permittee must submit to the Corps, before and after photographs, a description of the boat ramp, and a map showing the length and width of the ramp.
MP determined on a case-by-case basis depending on the amount of debris and type of habitat opened up; contact Corps for calculation	Remove concrete debris. Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location and length and width of the structure to be removed/removal area.
MP determined on a case-by-case basis depending on the length and type of habitat opened up; contact Corps for calculation	Remove an entire or portion of an existing marine railway (two rails and support structures). Once completed, the permittee must submit to the Corps, before and after photographs and a map showing the location and length and width of the marine railway/removal area.
MP determined on a case-by-case basis; contact Corps for calculation	Restoring a drift cell. May be used in conjunction with removal of groins, boat ramps, etc. For example, if a boat ramp or groin is removed, the applicant will get Mitigation Points for the actual footprint of the beach restored under the footprint of the fill removed **and** if the removal results in restoring a certain area of the drift cell along the beach, additional Mitigation Points, on a case-by-case basis may be created.

MP determined on a case-by-case basis; contact Corps for calculation	Improve habitat conditions of a stream (i.e., remove a fish barrier culvert) that has a confluence with inland marine waters; mitigation work should occur within1,000 linear feet of the high tide line.
MP determined on a case-by-case basis; contact Corps for calculation	Creation of pocket beaches.
MP determined on a case-by-case basis; contact Corps for calculation	Removal of derelict fishing gear and other debris from the nearshore environment.
MP determined on a case-by-case basis; contact Corps for calculation	Eelgrass transplanting.
MP Multiplied by 1.5	**Multiplier for Mitigation Work in Documented or Potential Forage Fish Spawning Habitat** - If any approved mitigation work will occur in the following shore zones for the following species, a multiplier of 1.5 will be applied to the MP of the mitigation work: Upper Shore Zone: sand lance and surf smelt documented or potential spawning habitat Lower Shore Zone: Pacific herring documented or potential spawning habitat
Varies, contact Corps for calculation and/or use the credit/debit methodology for the specific bank or ILF	**Mitigation Credits** – purchase credits from an approved mitigation or conservation bank and/or in-lieu fee (ILF) program. Current information on available mitigation banks or ILF programs can be found on the Washington Department of Ecology's website: http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/index.html A Bank or ILF Use Plan must be submitted with the permit application.
Varies, contact Corps for calculation if necessary	**Off-site Mitigation** – Corps approved permittee responsible mitigation at an off-site location. The type of mitigation can be any of the mitigation options listed in this table. Submit a mitigation plan for Corps review and approval. The mitigation plan must include a map and location of the off-site mitigation site. Depending on the type of proposed mitigation, individual ESA-consultation may be required. A site protection mechanism must be placed on mitigation area. See glossary of this document for a description of site protection mechanisms.

RGP-6 APPENDIX C: Resources and Glossary

RGP-6: Structures in Inland Marine Waters of Washington State
Version: April 20, 2018

RGP-6 Resources: Many documents referenced below are considered "living documents" and may be updated by the responsible agency as the science or regulations change. Website links are also subject to change. The documents listed below and links to these resources, can be found at the Seattle District Regulatory webpage at www.nws.usace.army.mil , select the Permit Guidebook, Chapter 2: Permitting, Section a.iv. Regional General Permits, RGP-6.

- For help filling out your Joint Aquatic Resource Permit Application (JARPA) go to: http://www.oria.wa.gov
- As-built Report Template
- Best Management Practices for Piling Removal
- Biological Opinions (NMFS Reference WCR-2016-4361, USFWS Reference 01EWFW00-2016-F-0565)
- Drawing Checklist
- Components of a Complete Eelgrass Delineation Report
- Components of a Complete Wetland Delineation Report
- Puget Sound Nearshore Habitat Values Model with HEA (NMFS White Paper and Mitigation Summary Tables)
- Joint-Use Agreement Template
- Major Estuary Zone maps
- Marbled Murrelet Monitoring Protocol (Appendix D of the USFWS Biological Opinion)
- Marine Mammal Monitoring Plan Guidance by NMFS
- Mitigation Calculator Tool (Appendix B)
- Mitigation Plan Template for Overwater Structures
- Mitigation Planting Monitoring Report Form (for riparian planting sites)
- Puget Sound Sub-basin Maps
- RGP-6 General Conditions
- Riparian Planting Mitigation Plan Requirements
- Vegetation Scenario Powerpoint
- Water Quality Certification and Coastal Zone Management Consistency
- Work Windows, Marine Waters and Tidal Reference Area Map
- Area Habitat Biologists familiar with your project area and information on the Hydraulic Project Approval (HPA) process can be found on WDFW's website: http://wdfw.wa.gov/licensing/hpa
- Coastal Atlas Map website: Shoreline photos and maps of documented habitat/biology features in your project area may be found on the Washington Department of Ecology's. Note that the absence of mapped features does not preclude its existence and should not be used in place of a survey. Photos may not represent most current conditions but can be helpful for geographical context.

Glossary: Many of the terms in this Glossary are defined for use only with this RGP.

Bank is the rising ground bordering the waterbody forming an edge or steep slope.

Bluff-backed beaches are defined as beaches which terminate at the toe of a steep bluff.

Conservation Banking is a tool for conserving listed plant and animal species and their habitat through Section 7 and Section 10 of the ESA. Conservation banks are lands (usually large tracts) acquired by third parties to be managed specifically for these species and protected in perpetuity by a conservation easement. Conservation banks develop and sell credits within a specified Service Area to offset adverse impacts to listed species that occur elsewhere.

DBH (diameter at breast height) is the diameter of a tree (in inches) at the point 4.5 feet above the ground, measured from the uphill side.

Dolphin is a piling assemblage

Drift/littoral cells: Units of beach that include a source of sediment, conveyance of sediment along the shoreline, and a sink for sediment, either at a convergence zone where two drift cells merge, or off-shore below the depth of wave action. Like watersheds, they provide a way of organizing complex ecosystems. Drift cells have been mapped for Puget Sound and can be viewed on the Washington Department of Ecology's Coast Atlas on their website.

Endangered and Threatened Species: An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered in the foreseeable future.

Float support piling or *stub piling* are piling used to suspend the float above the tidal substrate. The float rests on top of the float support piling, not the tidal substrate.

Forage fish spawning habitat: For the following forage fish species, Pacific herring *(Clupea pallasii)* spawning habitat is roughly defined as: eelgrass and macroalgae located between 0 to -10 feet tidal elevation; surf smelt (*Hypomesus pretiousus*) – substrate consisting of pea gravel or coarse sand (gravel diameter 0.005 – 0.35 of an inch) between the high tide line to +7 feet tidal elevation relative to the Seattle tide gauge; Pacific sand lance (*Ammodytes hexapterus*) – substrate consisting of pure fine grain sand beaches between the high tide line to +5 feet tidal elevation, relative to the Seattle tide gauge. Note that forage fish eggs may be found at higher elevations than the high tide line near the toe of the bank and the appropriate tidal gage should be used for your location.

- *Documented* forage fish spawning habitat is habitat inspected and determined by WDFW to support actual forage fish spawning.
- *Potential* forage fish spawning habitat is habitat with the characteristics of forage fish spawning habitat as described above and is within one mile of documented forage fish spawning habitat.

Functional Grating is grating which is not covered or blocked underneath by any objects, such as float tubs.

Groin is a rigid structure (constructed of rock, wood, or other durable material) built out from the shore, usually perpendicular to the shoreline, to prevent erosion or trap sand.

Hardened shoreline is the area of shoreline that is no longer natural but has been replaced with structures, including but is not limited to concrete, rock or timber bulkheads, riprap, or concrete boat ramp access.

Inland marine waters in Washington State are tidally influenced waters within the state of Washington limited to the marine waters ranging from South Puget Sound and Hood Canal to and including the Strait of Juan de Fuca and the Strait of Georgia. This does not include the outer coast adjoining the Pacific Ocean or tidally influenced rivers (above river mile "zero") draining into these water bodies.

In-lieu fee program refers to a program involving the restoration, establishment, enhancement and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources

management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee (ILF) program sells compensatory mitigation credits to permittees whose obligation to provide mitigation is then transferred to the program sponsor. The sponsor must use the funds pooled from multiple permittees within a specified service area to restore, establish, enhance and/or preserve one or more mitigation receiving sites. The operation and use of an ILF program are governed by an ILF Program Instrument.

Joint-use piers, floats, and ramps are constructed and utilized by property owners on more than one residential waterfront property or by a homeowner's association that owns waterfront property.

Major Estuary Zone is the transition zone at the confluence of the freshwater tributaries listed below and tidal waters. See maps showing these zones on our webpage at: www.nws.usace.army.mil, select Regulatory Branch, Permit Information, go to the "Permit Guidebook" webpage, then select "Permitting, Regional General Permits," and look at Major Estuary Zone maps.

In Puget Sound:	**In Hood Canal:**	**In the Strait of Juan de Fuca:**
1. Nooksack River	11. Union River	25. Chimacum Creek
2. Skagit River	12. Tahuya River	26. Salmon/Snow Creeks
3. Stillaguamish River	13. Skokomish River	27. Jimmycomelately Creek
4. Snohomish	14. Lilliwaup Creek	28. Dungeness River
5. Snoqualmie River	15. Dewatto Creek	29. Morse Creek
6. Duwamish River	16. Hamma Hamma River	30. Elwha River
7. Puyallup River	17. Eagle Creek	
8. Chambers Creek	18. Duckabush River	
9. Nisqually River	19. Dosewallips River	
10. Deschutes River	20. Big Beef Creek	
	21. Stavis Creek	
	22. Little Anderson Creek	
	23. Seabeck Creek	
	24. Big and Little Quilcene River	

Mean high water (MHW) The elevation on the shore of tidal waters reached by the plane of the average of the lower of the two daily high tides, generally averaged over a period of 19 years. This elevation has been established at set tide gauges throughout Washington. Tide gauges information may be obtained online: http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/Streams.aspx

Mitigation Bank refers to a site where wetland and/or other aquatic resources are restored, established, enhanced and/or preserved expressly for the purpose of providing compensatory mitigation in advance of unavoidable and authorized impacts to similar resources. Mitigation credits generated at the bank are sold to permittees whose obligation for all aspects of the compensatory mitigation is then transferred to the mitigation bank sponsor. Mitigation banks have specific service areas where the bank is authorized to operate.

Mooring Buoys means non-commercial, single-boat mooring buoys. Information about State requirements can be found on the Department of Natural Resources website. http://www.dnr.wa.gov/ (Search for "mooring buoys").

Native species do not include hybrids or cultivars such as dwarf varieties of plants. Please include the genus and species when describing existing or proposed plants at the project and/or mitigation site.

Offsite means outside the property boundaries of the property owner(s) proposing the project. For the purpose of this RGP, the property boundary in the water, unless already shown on a deed or legal description, is a straight-line extension of the property line on the land, projected waterward, and perpendicular to the shoreline.

Onsite means within the property boundaries of the property owner(s) proposing the project. For the purpose of this RGP, the property boundary in the water, unless already shown on a deed or legal description, is a straight-line extension of the property line on the land, projected waterward, and perpendicular to the shoreline.

Open area or *open space* of grating is the area enclosed between the rectangular bars and cross-rods in bar grating, or the area enclosed between the bonds and strands in expanded grating. For floating watercraft lifts, open space is the area between the pontoons.

Overwater structures are defined as piers, ramps, floats, marine rails, mooring buoys, piling, steps, open-frame stairways, bluff-to beach trams, watercraft grids or lifts.

Pocket Estuaries are defined as small sheltered areas along the shoreline that have freshwater influence at least part of the year. The location of pocket estuaries can be found at https://fortress.wa.gov/ecy/coastalatlas/tools/Map.aspx (Under "Contents", select "Pocket Estuaries"). The lateral extent of each pocket estuary is the protected (pocket or lagoon feature) area.

Project area is defined as the area the overwater structure will cover and 25 feet on all sides of the structures including landward of the line of the high tide line.

Remove means the removal of material from the area waterward of the High Tide Line to be disposed of in an upland location or approved disposal area landward of the High Tide Line using the appropriate best management practices.

Single-user piers, floats, and ramps are constructed and utilized by only one residential waterfront property owner.

Site protection mechanisms includes a description of the legal arrangements and instruments, including mitigation site ownership that will be used to ensure the long-term protection of the compensatory mitigation project, such as:

- Deed Recording: Deed recording requires that the permittee record on the deed for the mitigation site property a copy of the DA permit, drawings, and a description of the mitigation area identified in the final mitigation plan.
- Restrictive Covenants: A restrictive covenant (often called a deed restriction) is a provision in a deed limiting the use of the property by prohibiting certain uses. The restrictive covenant is established by the land owner and does not include a third party. It is recorded against the property title and runs with the land.
- Conservation Easements: It is a legal restriction placed on a piece of property to protect the resources (natural or man-made) associated with the parcel. It restricts the type and amount of activities that can take place on a parcel of land. Easements are recorded on the property deed and are held in trust by a conservation easement "holder" such as a land trust or government agency.

Skirting is vertical boards attached to the edge of a pier extending downward.

Special aquatic sites are geographic areas, large or small, possessing special ecological characteristics of

productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas may be impossible or difficult to replace and are recognized as significantly contributing to the health of the ecosystem (i.e., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, riffle and pool complexes). (40 CFR Part 230)

Sub-basins of inland marine waters of Washington State. The sub-basin boundaries referenced in this document were identified by the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) and a map of these seven areas can be found on the Corps website. Identification of the sub-basin is need to determine if there will be impacts to Humpback whales per Special Condition 7.2.e. or RGP-6. For more detailed information see the PSNERP website.

Submerged aquatic vegetation is defined as rooted vascular plants and attached macroalgae (drift and floating algae are not included in this definition for RGP-6).

Treated wood preservatives are chemicals used to control wood degradation. The EPA reviews registered pesticides every 15 years to determine whether it continues to meet the statutory standard of no unreasonable adverse effects on human health or the environment. The EPA is the authority on the suitability of treated wood products in the marine environment and should be contacted for more information.

Uplands are non-wetland areas landward of the high tide line.

Watercraft lift is a free-standing, floating, or pier-affixed device which supports a watercraft and prevents the watercraft from resting on the tidal substrate.