

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

Version: October 19, 2017

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.

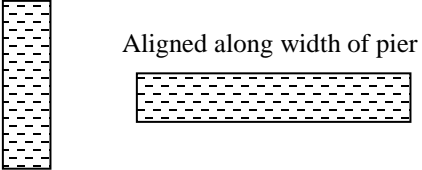
Hard copies of all application materials must be submitted and the additional submittal of an *electronic* copy of materials on a disc is strongly recommended.

<b>Corps and Programmatic ESA Consultation Reference Numbers (NWS-2002-1291, RGP-6)</b>
<b>NMFS Reference Number:</b> <i>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.</i>
<b>USFWS Reference Number:</b> <i>01EWF00-2016-F-0565 for bull trout and Marbled murrelet</i>

	<b>Special Conditions</b>	<b>Notes</b>
	<b>1. PIERS (a flat deck structure supported by piles) or LANDINGS and STEPS of a stairway</b>	
	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.	
	<b>2. FLOATS (a flat deck structure supported by flotation devices)</b>	
	a. For a <b>single user</b> 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 <b>joint-use</b> structure, the float width must not exceed 8 feet and the length cannot exceed 60 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.	

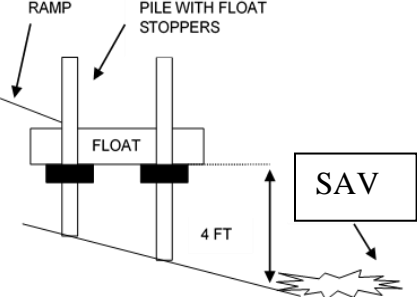
<p>d. Floats may be held in place with lines anchored with a helical screw or “duckbill” embedded anchor, piles with stoppers and/or float support/stub piles.</p> <p>(1) For a <b>single-user</b> float, a maximum of 4 piles (not including stub piles) or embedded anchors may be installed.</p> <p>(2) For a <b>joint-use</b> float, a maximum of 8 piles (not including stub piles) or embedded anchors may be installed.</p> <p>(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.</p> <p>(4) Only if the substrate prohibits use of piles or embedded anchors may a Corps-approved alternative be used.</p> <p>(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.</p>	
<p>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.</p>	
<p>f. Flotation shall be installed under the solid portions of the float, not under the grating (unless the entire float is grated).</p>	
<p>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.</p>	
<p>h. No floats may be installed in the Upper Shore Zone (area landward of +5 MLLW).</p>	
<b>3. FLOAT STOPS</b>	
<p>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.</p>	
<p>b. If float stops attached to piles are not feasible (provide explanation) then up to four 10-inch diameter stub piles may be installed.</p>	
<p>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.</p>	<p>(1) In coarse substrate, D25<sup>3</sup> of 25 mm or larger for a grain size sample taken from upper 1 foot of substrate</p> <p>(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)</p>
<b>4. RAMPS (a sloped deck structure typically connecting a pier and a float)</b>	
<p>a. The width of the ramp cannot exceed 4 feet.</p>	

<sup>3</sup> “D25 of 25mm” means that 25% of the substrate has a grain size of 25 mm or less.

<p>b. Ramps must be fully grated with either multi-directional grating with 40% open space or square grating with 60% open space.</p>	
<p><b>5. MARINE RAILS</b></p>	
<p>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.</p>	
<p><b>6. GRATING</b></p>	
<p>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.</p>	
<p>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.</p>	
<p>c. Grating openings should be oriented lengthwise in the east-west direction to the maximum extent practicable.</p> <p>See diagrams showing orientation of the grated openings.</p>	<p>North ↑</p>  <p>Aligned along the length of the pier</p> <p>Aligned along width of pier</p>
<p><b>7.1 PILES AND/OR FILL</b></p>	
<p>a. Proposed new piles may be steel, concrete, plastic, untreated wood or wood treated with approved wood preservatives per Section 8 of this document.</p>	
<p>b. Piles supporting a new pier must be spaced no closer than 20 feet apart.</p>	
<p>c. A maximum of 2 moorage piles may be installed to accommodate the moorage of boats exceeding the length of the floats.</p>	
<p>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.</p>	
<p>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.</p>	
<p><b>7.2 PILE DRIVING</b></p>	
<p>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.</p>	
<p>b. Pile driving must occur during daylight hours only, for a maximum of 12 hours per day.</p>	

<p>c. Requirements for steel piling:</p> <p>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.</p> <p>2) Vibratory installation with impact proofing where the number of impact strikes will not exceed 300 per day is allowed.</p>	
<p>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 <i>Marine Mammal Monitoring Plan</i> (MMMP) must be prepared and submitted with this application. This information will be reviewed by a NMFS biologist.</p>	<p>A monitoring plan must be submitted to Corps.</p> <p>Guidance for developing an MMMP can be found on NOAA’s website:  <a href="http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/monitoring_plan_guidance.html">http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/monitoring_plan_guidance.html</a></p> <p>NOAA’s website identifies these quadrants and contains guidance on the potential for ESA-listed marine mammal occurrences in project areas:  <a href="http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/evaluating_sound.html">http://www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/evaluating_sound.html</a></p>
<p>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:  <a href="http://www.orcanetwork.org/Archives/index.php?categories=file=Sightings%20Archives%20Home">http://www.orcanetwork.org/Archives/index.php?categories=file=Sightings%20Archives%20Home</a> for Humpback whale sightings.</p>	<p>Contact NMFS for assistance making this determination. If NMFS determines a monitoring plan is required, it must be submitted to Corps.</p> <p>To determine the PS Sub-basin your project is in, please see the PS Sub-basin maps on the Corps webpage.</p>
<p>f. All pile driving must cease <u>immediately</u> if any marine mammal is within 300 feet of the project, and shall only continue once the animal is beyond 300 feet.</p>	
<p>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:</p> <p>(1) Placement of a block of wood (minimum 6 inches thick) between the hammer and the pile, and;</p> <p>(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.</p>	
<p>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.</p>	<p>An explanation of how the work will meet sound thresholds must be in the permit application.</p>

<b>8. TREATED WOOD</b>	
The only treated wood allowed is ammoniacal copper zinc arsenate (ACZA). However, ACZA piles may <b>not</b> 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.
<b>9. WATERCRAFT/LIFTS AND GRIDS</b>	
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 2 additional piles may be used to attach a watercraft lift/grid to the piles used for anchoring the floats.	
<b>10. MOORING BUOYS</b>	
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 buoys may be anchored within a 117 foot radius of the proposed buoy. Note: This requirement can be waived by the District Engineer up to no more than 3 other buoys within a 117 foot radius of the proposed buoy provided water quality impacts to shellfish are minimized.	Show all existing buoys within a 117 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 <i>Special Public Notice</i> (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.	
<i>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 <a href="http://www/dnr.wa.gov/">http://www/dnr.wa.gov/</a> (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)).</i>	
<b>11. SUBMERGED AQUATIC VEGETATION (SAV)</b> 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.	

<p>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.</p>	
<p>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.</p>	
<p><b>12. FORAGE FISH (Pacific Herring, surf smelt, and sand lance) SPAWNING HABITAT</b></p>	
<p>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.</p>	<p>Maps of <u>documented</u> forage fish spawning habitat can be found online at WDFW’s Forage Fish Spawning Map online:  <a href="http://wdfw.maps.arcgis.com/home/webmap/viewer.html?webmap=19b8f74e2d41470cbd80b1af8dedd6b3&amp;extent=-126.1368,45.6684,-119.6494,49.0781">http://wdfw.maps.arcgis.com/home/webmap/viewer.html?webmap=19b8f74e2d41470cbd80b1af8dedd6b3&amp;extent=-126.1368,45.6684,-119.6494,49.0781</a></p>
<p>b. If there is <u>no</u> documented forage fish spawning habitat in the project area <u>but</u> there is documented forage fish habitat within one mile of the area, you must evaluate the substrate to see if <u>potential</u> forage fish spawning habitat exists in the project area. If it does, you must show the extent of this habitat on a project drawing.</p>	<p>See Appendix C, Glossary for a description of <u>potential</u> forage fish spawning habitat in terms of elevation range and substrate size and type.</p>
<p>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.</p>	<p>Additional mitigation may be required for spans less than 40 feet in the Upper Shore Zone.</p>
<p>d. For impacts from floats in herring documented or potential spawning habitat in the Lower Shore Zone, <b>50% more mitigation is required</b> (see Appendix B).</p>	
<p><b>13. WORK WINDOWS</b></p>	
<p>a. The work will be conducted during the Corps-required in-water work window. Please refer to <i>Marine Water Work Windows</i> on the Corps website.</p>	<p>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.</p>

<p>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.</p>	<p>WDFW maintains a list of qualified biologists on their website.</p>
<p>c. The following work window restriction is in place whenever steel piles will be driven or proofed with an impact hammer:</p> <p>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).</p>	
<b>14. WORK IN THE DRY</b>	
<p>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.</p>	<p>Please review Ecology's Water Quality Certification for RGP-6 on the Corps' webpage. Exceedances of water quality standards are not authorized.</p>
<b>15. OPERATION OF EQUIPMENT</b>	
<p>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.</p>	
<p>b. Equipment shall be operated in a way that minimizes turbidity and meets State water quality standards.</p>	
<p>c. Barges may not ground out at any time. Spud barges can be used if there is the possibility of grounding.</p>	
<p>d. Any disturbance of the beach areas, waterward of the high tide line shall be restored immediately upon completion of construction and mitigation work.</p>	
<b>16. MINIMAL DISTURBANCE OF RIPARIAN ZONE</b>	
<p>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.</p>	
<p>b. Disturbance of bank vegetation shall be limited to a 12-foot work corridor on either side of the proposed work.</p>	
<p>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.</p>	
<p>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.</p>	
<p>e. Disturbed bank vegetation shall be replaced with native species appropriate for the site. A Planting Plan must be</p>	

	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.	
<b>17. MITIGATION</b>		
	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.	
<b>18. SKIRTING</b>		
	Skirting on any portion of an overwater structure is <u>not</u> authorized by this RGP.	
<b>19. LIGHTING</b>		
	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: October 19, 2017

**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.

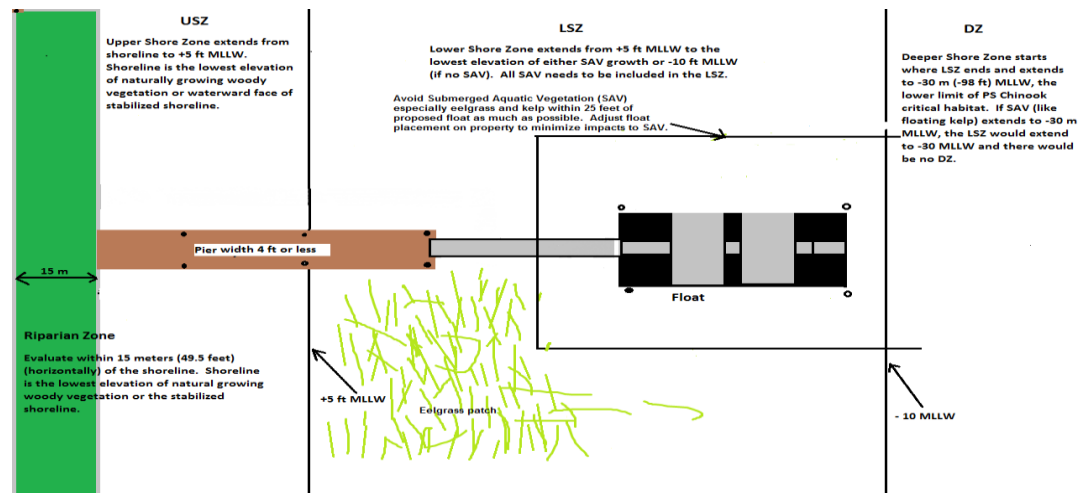
Step 2: Review Table 1 (Vegetation Scenario) before filling out Table 2 (Mitigation Calculations) which will provide the total number of mitigation points required for the project. Refer to the *RGP-6 Vegetation Scenario Guide and Examples Powerpoint* on the Corps' webpage for assistance with understanding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

- Upper Shore Zone (USZ) is the area landward of +5 MLLW
- Lower Shore Zone (LSZ) is the area waterward of +5 MLLW and landward of -10 MLLW, or lowest elevation of SAV.
- 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 <i>not</i> 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 ( <i>Zostera marina</i> ) 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)	
<b>Riparian Zone Impacts (From the high tide line to 50 feet landward of the high tide line)</b>			
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	
<b>Upper Shore Zone (USZ) Impacts (From the high tide line to +5 feet MLLW)</b>			
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.	<u>0</u> 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	
<b>Lower Shore Zone (LSZ) Impacts (Lower than +5 feet MLLW to -10 feet MLLW and limits of SAV)</b>			
<b>Pier and Piles</b>			
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.	<u>0</u> 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:	$\left[1 \times \frac{\text{s.f.}}{100}\right] + 0.2 = \text{____ MP}$	____ MP	
<b>Floats and Floating Watercraft Lifts</b>			
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

<b><i>Floating watercraft lifts</i></b>			
Insert the square feet of floating watercraft lifts (pontoons only) located in LSZ and complete the calculations in the formula.	Vegetation Scenario 0	$2.2 \times \frac{\text{s.f.}}{100} + 2.7$	_____ MP
	Vegetation Scenario 1	$3.5 \times \frac{\text{s.f.}}{100} + 4.5$	_____ MP
	Vegetation Scenario 2	$4.9 \times \frac{\text{s.f.}}{100} + 6.2$	_____ MP
	Vegetation Scenario 3	$6.3 \times \frac{\text{s.f.}}{100} + 7.9$	_____ MP
<b>Subtotal (Pier and Piles + Floats) for LSZ</b>			_____ MP
<b>If the project is located within documented or potential herring spawning habitat, multiply subtotal by 1.5.</b>			_____ MP
<b>Deeper Shore Zone (DSZ) Impacts (Deeper than -10-feet MLLW or outer limits of SAV)</b>			
Insert the square footage of floats located in the DSZ and complete the calculations in the formula.		$1.8 \times \frac{\text{s.f.}}{100} + 1.4$	_____ MP
<b>SUB-TOTAL NUMBER OF MITIGATION POINTS (Add up the Total MP for <u>all</u> Zones including forage fish spawning factors):</b> _____ MP			
<b>Debiting Factors for Environmental Conditions (See the glossary for more information on these topics)</b>			
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
<b>(SUB-TOTAL WITH DEBITING FACTORS)</b>			
<b>TOTAL REQUIRED MITIGATION POINTS:</b>			_____ <b>MP</b>

**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
<p>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</p> <p>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</p>	<p>Plant native trees and shrubs landward of the high tide line where there previously was invasive vegetation, lawn, or impervious surface.</p> <p>No structures such as sheds or boathouses may separate vegetation from the water.</p> <p>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.</p> <p>The permit and mitigation planting area must be recorded on the deed.</p> <p>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].</p> <p>See Corps' <i>Riparian Planting Mitigation Plan Requirements</i> on the Corps' webpage and incorporate these requirements into your Mitigation Plan.</p>
<p>7.2 MP</p> <p>10 MP if area is (<u>one</u> of the following):</p> <ul style="list-style-type: none"> <li>• adjacent to existing forage fish spawning habitat</li> <li>• located in a pocket estuary or beach</li> </ul>	<p>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.</p> <p>* 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.</p> <p>Once completed, the permittee must submit to the Corps, before and after photographs of the placement area.</p>
<p>MP determined on a case-by-case basis depending on the area; contact Corps for calculation</p>	<p>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: (<a href="http://www.restorationfund.org/sites/default/files/olympia_oyster_restoration_plan_final.pdf">http://www.restorationfund.org/sites/default/files/olympia_oyster_restoration_plan_final.pdf</a>). It must be shown that this mitigation option is suitable and would provide an ecological lift.</p> <p>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.</p>

	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	<p>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.)</p> <p>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.</p> <p>This option may require multiple years of beach nourishment to be effective.</p> <p>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.</p>
0.1 MP per 100 SF	Permanently prevent an existing float, that currently grounds out, from resting on the tidal substrate (must be elevated <i>at least 1 foot</i> 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 <i>at least 3 feet</i> 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	<p>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.</p> <p>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.</p>
MP determined on a case-by-case basis depending on the age, type, and location of structure; contact Corps for calculation	<p>Remove part or all of an existing overwater structure.</p> <p>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.</p>
<p>0.8 MP per linear foot removed and planted</p> <p>1.2 MP per linear foot removed and planted if the removed structure was (<u>one</u> of the following):</p> <ul style="list-style-type: none"> <li>• adjacent to existing forage fish spawning habitat</li> <li>• located in a pocket estuary or beach</li> </ul> <p>1.7 MP per linear foot removed and planted if <u>two</u> of the above bulleted items were met</p>	<p>Completely remove hardened bank stabilization and plant at least a 10-foot wide buffer along the shoreline with native vegetation (must meet <i>Riparian Planting Mitigation Requirements</i> (located on our website).</p> <p>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.</p> <p>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: <a href="http://wdfw.wa.gov/publications/01583/">http://wdfw.wa.gov/publications/01583/</a>.</p> <p>Please contact the Corps for applicable mitigation points for partially removing hardened bank stabilization and partial replanting of riparian.</p>

<p>3 MP per 100 SF</p> <p>4.5 MP per 100 SF removed if the area was (<u>one</u> of the following):</p> <ul style="list-style-type: none"> <li>• adjacent to existing forage fish spawning habitat</li> <li>• located in a pocket estuary or beach</li> </ul> <p>6.8 MP per 100 SF removed if <u>two</u> of the above bulleted items were met</p>	<p>Remove an entire or portion of an existing manmade groin.</p> <p>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.</p>
<p>MP determined on a case-by-case basis depending on the area; contact Corps for calculation</p>	<p>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.</p> <p>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.</p>
<p>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</p>	<p>Remove an entire or portion of an existing boat ramp.</p> <p>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.</p>
<p>MP determined on a case-by-case basis depending on the amount of debris and type of habitat opened up; contact Corps for calculation</p>	<p>Remove concrete debris.</p> <p>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.</p>
<p>MP determined on a case-by-case basis depending on the length and type of habitat opened up; contact Corps for calculation</p>	<p>Remove an entire or portion of an existing marine railway (two rails and support structures).</p> <p>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.</p>
<p>MP determined on a case-by-case basis; contact Corps for calculation</p>	<p>Restoring a drift cell. May be used in conjunction with removal of groins, boat ramps, etc.</p> <p>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 <b>and</b> 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.</p>
<p>MP determined on a case-by-case basis; contact Corps for calculation</p>	<p>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 within 1,000 linear feet of the high tide line.</p>

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	<p><b>Multiplier for Mitigation Work in Documented or Potential Forage Fish Spawning Habitat</b> - 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</p>
Varies, contact Corps for calculation and/or use the credit/debit methodology for the specific bank or ILF	<p><b>Mitigation Credits</b> – 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:  <a href="http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/index.html">http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/index.html</a></p> <p>A Bank or ILF Use Plan must be submitted with the permit application.</p>
Varies, contact Corps for calculation if necessary	<p><b>Off-site Mitigation</b> – 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.</p>