

Reference # NWS-2018-274  
 Project Name Westcott Shores

S.J.C. DEPARTMENT OF

MAY 31 2018

COMMUNITY DEVELOPMENT

## Regional General Permit (RGP) 6 Overwater Structure Mitigation Calculation Tool (Appendix B)

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, briefly describe the project and then enter the applicable information into the Required Mitigation tab. This will report the number of Mitigation Points (MPs) required for the project. Next, on the Proposed Mitigation tab, briefly describe the mitigation proposal and enter the applicable information. Some mitigative measures yield MPs on a case-by-case basis. Discuss these options with your Regulatory Project Manager. Return to the cover sheet to review the totals and any remaining mitigation requirement.

	Mitigation Points	DSAYS
<b>Total Required Mitigation (Appendix B, Table 2)</b>	<b>47.55</b>	<b>0.4755</b>
<b>Total Proposed Mitigation (Appendix B, Table 3)</b>	<b>8.95</b>	<b>0.0895</b>
<b>Remaining Mitigation Points Required</b>	<b>38.60</b>	<b>0.3860</b>

<b>SHORE ZONES</b>	<b>Description</b>
Riparian Zone	HTL to 50 feet landward of HTL
Upper Shore Zone (USZ)	HTL to +5 feet MLLW
Lower Shore Zone (LSZ)	+5 feet MLLW to -10 feet MLLW and limits of SAV
Deeper Shore Zone (DSZ)	Deeper than -10 feet MLLW or outer limits of SAV

Appendix B: Table 1

<b>VEGETATION SCENARIO</b>	<b>Native Eelgrass and/or Kelp occurs within 25 feet of project area</b>	<b>Other SAV occurs within 25 feet of project area (no native eelgrass or kelp present)</b>
Scenario 0	N/A	≤ 10%
Scenario 1	1-25% Combined SAV	11-25%
Scenario 2	26-69% Combined SAV	26-75%
Scenario 3	≥ 70% Combined SAV	> 75%

\*SAV defined as rooted vascular plants and attached macroalgae. Drift algae and *Ulva spp.* Are not included when determining cover percentage except where *Ulva spp.* occurs in documented herring spawning areas.



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**Total Required Mitigation (Appendix B, Table 2)**

**Brief description of proposed project**

The applicant proposes to place a joint-use pier, ramp, and float system with stairwell structure to be shared between 5 parcels (two optional users) at the Westcott Shores Community in Westcott Bay. The stairwell structure is proposed landward of the ordinary high water mark. The pier would be 5' 7" x 176', with a 4' 7" x 48' gangway ramp, 6' x 10' landing float, and 8' x 80' moorage float. The pier would have ten (10) associated 10" diameter galvanized steel pier piles and the landing float would have two (2) 10" diameter float piles. Four (4) submerged float anchors would be used to keep the float in place. All structures would be fully grated with 60% functional grating. The floatation would be fully enclosed in hard plastic, and the decking would be molded plastic or fiberglass.

Impact	Units	Qty	Mitigation Points
<b>RIPARIAN ZONE IMPACTS</b>			
Vegetation removal adjacent to soft shorelines (including soft bioengineered shorelines): Enter SF of woody vegetation with a DBH > 4 in riparian work strip to be permanently cleared for access to overwater structure.	SF of woody vegetation permanently cleared	0	0.00

**UPPER SHORE ZONE (USZ) IMPACTS**

**Pier**

If the pier is fully grated and width is < 4 feet for single use or < 6 feet for joint-use, no mitigation points.	SF of structure	173	0
Piles are spaced closer than 40 feet apart	Yes or No	no	N/A
Project is located in documented sand lance or surf smelt spawning habitat	Yes or No	no	N/A
If the USZ pier is fully grated and width is > 4 feet for single use or > 6 feet for joint-use, enter SF of structure. (may be required for ADA Access).	SF of structure		0.00
	Number of all pier pilings		
If the pier in the USZ has solid-decking, include the SF of solid-decked portion of the structure here (Does not qualify for RGP-6). If the structure also exceeds width	SF of solid-deck structure		0.00
	Number of all pier pilings		

**USZ Forage Fish Factor (for oversized or solid-decked structures)**

Forage Fish Factor: Project is located in documented sand lance or surf smelt spawning habitat.	Yes or No	no	0.00
<a href="#">Forage Fish Maps</a>			

Impact Units Qty Mitigation Points

LOWER SHORE ZONE (LSZ) IMPACTS

Must enter vegetation scenario for LSZ (See table 1)	Enter Vegetation Scenario 0-3	0	N/A
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**Piers & Piles**

If the pier is fully grated and width is ≤ 4 feet for single use or ≤ 6 feet for joint-use, enter the SF of structure. No MPs accrued if vegetation scenario 0-2.	SF of structure	810	0.00
If the pier in the LSZ is fully grated and width is > 4 feet for single use or > 6 feet for joint-use, enter SF of structure.	SF of structure		0.00
	Number of all pier pilings for piers with solid decking, only.		
If the pier in the LSZ is proposed to include solid-decking, include the SF of solid-decked portion of the structure here (Does not qualify for RGP-6). If the structure also exceeds width requirements, enter grated SQFT of pier above.	SF of solid-deck structure		0.00
	Number of all pier pilings for piers with solid decking, only.		

**Floats**

Enter the SF of float(s), including access float, located in LSZ where the float is 50% grated with 60% or more open space and there are 8 or less piles.	SF of structure	700	31.70
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**Floating Watercraft Lifts**

Enter the SF of floating watercraft lifts located in the LSZ.	SF of pontoon	0	0.00
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**LSZ Forage Fish Factor**

If the project is located near documented or potential herring spawning habitat, enter Yes, otherwise No.	Yes or No	yes	15.85
<a href="#">Forage Fish Maps</a>			



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### MITIGATION CREDITS

**Brief description of proposed mitigation**

The applicant proposes to remove two (2) existing, permitted mooring buoys from the lower shore zone, two (2) sets of concrete stairwell landings from the upper shore zone, and two (2) stairwells from the riparian zone in conjunction with this project. Additionally, areas where structures are removed from the riparian zone will be revegetated, and additional vegetation will be added to the bank structure where vegetation is currently absent. No disturbance or removal of vegetation is proposed. Despite being in Westcott Bay, where the entire bay is documented as herring spawning habitat, the project area is void of submerged aquatic vegetation and represents poor spawning habitat. The proposed joint-use dock is intended to provide water access to the owners of up to five (5) parcels, two (2) of which are optional users. This guarantees a reduction in overall development of the shoreline in this area on all involved parcels. Structural removals and revegetation are listed on the Structure Removal Worksheet as the mitigation calculators do not accommodate these improvements adequately.

Mitigation Option	Units	Qty	Mitigation Points (Credit)
<b>Riparian Planting</b>			
Plant native woody vegetation (within 10 feet of bulkhead)	Planted area in SF		0.00
Plant native woody vegetation (within 50 feet of natural shoreline)	Planted area in SF (across many parcels)	1259	8.81
<b>Spawning Gravel</b>			
Placement of beach nourishment (forage fish habitat improvement)	Case-by-Case		
<b>Large Woody Material (LWM)</b>			
Install large woody material anchored in USZ	Placement area in SF		0.00

**Remove Piles**

<b>Mitigation Option</b>	<b>Units</b>	<b>Qty</b>	<b>Mitigation Points (Credit)</b>
Remove non-treated wood, concrete, plastic, steel piles	Number of piles		0.00
Remove creosote-treated piles	Number of piles		0.00

**Install Float Stops**

Install float stops on existing float that currently grounds out (does not count if float is being removed)	SF of existing structure		0.00
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**Remove Existing Functional Structures**

(Constructed within the last 25 years)

**UPPER SHORE ZONE (USZ) MITIGATION**

Remove existing pier in USZ: Enter SF for fully grated structure if width is > 4 feet for single use or > 6 feet for joint-use.	SF of structure		0.00
Remove existing pier in USZ (vegetation scenario 0): Enter SF of solid-decked portion of the structure here (Does not qualify for RGP-6). If the structure also exceeds width requirements, enter any grated SF of pier above.	SF of solid-deck structure		0.00
Remove existing float or boat lift in USZ (assumes vegetation scenario 0). Additional credit may be granted if removal is proposed in high quality SAV scenario. Piling removal counted separately.	SF of solid-decking on float in USZ		0.00
Forage Fish Factor: Project is located in documented sand lance or surf smelt spawning habitat.	Yes or No	no	0.00

Mitigation Option	Units	Qty	Mitigation Points (Credit)
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**LOWER SHORE ZONE (LSZ) MITIGATION**

<b>Must enter vegetation scenario for LSZ (See table 1)</b>	<b>Enter Vegetation Scenario in LSZ</b>		<b>N/A</b>
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**Piers**

Removal of fully grated pier sections in the LSZ with width > 4 feet for single use or > 6 feet for joint-use; enter SF of grated portions of pier.	SF of structure		0.00
Removal of in the LSZ with solid-decking, include the SF of solid-decked portion of the structure here. If the structure also exceeds width requirements, enter grated SQFT of pier above.	SF of solid-deck structure		0.00

**Floats**

Remove grated float (assumes 50% grated surface) including pilings.	SF of existing grated float in LSZ		0.00
Remove solid-decked float or watercraft lift in LSZ	SF of existing solid-decked float or watercraft lift in LSZ		0.00
Forage Fish Factor: Project is located in documented herring spawning habitat.	Yes or No	yes	0.00
Remove structure in DSZ	SF of existing structure in DSZ		0.00

**Remove Existing Old Structures**

(Constructed more than 25 years ago)

**UPPER SHORE ZONE (USZ) MITIGATION**

Remove existing pier in USZ: Enter SF for fully grated structure if width is > 4 feet for single use or > 6 feet for joint-use.	SF of structure		0.00
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Mitigation Option	Units	Qty	Mitigation Points (Credit)
Remove existing pier in USZ. Enter SF of solid surface, only (assumes vegetation scenario 0). Additional credit may be granted if removal is proposed in high quality SAV scenario. Piling removal counted separately.	SF of solid-decking on elevated pier in USZ or LSZ.		0.00
Remove old float or floating watercraft lift in USZ (assumes vegetation scenario 0). Additional credit may be granted if removal is proposed in high quality SAV scenario. Piling removal counted separately.	SF of solid-decking on float or area of pontoons on lifts in USZ		0.00
Forage Fish Factor: Project is located in documented sand lance or surf smelt spawning habitat.	Yes or No		0.00

**LOWER SHORE ZONE (LSZ) MITIGATION**

<b>Must enter vegetation scenario for LSZ (See table 1)</b>	<b>Enter Vegetation Scenario in LSZ</b>		<b>N/A</b>
Removal of fully grated pier sections in the LSZ with width > 4 feet for single use or > 6 feet for joint-use; enter SF of grated portions of pier.	SF of structure		0.00
Removal of pier in LSZ with solid-decking, include the SF of solid-decked portion of the structure here. If the structure also exceeds width requirements, enter grated SQFT of pier above.	SF of solid-deck structure		0.00
Remove grated float (assumes 50% grated surface) including pilings.	SF of existing grated float in LSZ		0.00
Remove solid-decked float or watercraft lift in LSZ. Piling removal counted separately.	SF of existing solid-decked float or watercraft lift in LSZ		0.00
Forage Fish Factor: Project is located in documented herring spawning habitat.	Yes or No	yes	0.00
Remove structure in DSZ	SF of existing structure in DSZ		0.00

Mitigation Option	Units	Qty	Mitigation Points (Credit)
<b>Remove Existing Bank Stabilization / Groin / Debris</b>			
Remove existing bank stabilization and plant	LF removed and planted		0.00
Remove entire existing manmade groin	SF of groin removed		0.00
Replacement of hardened bank stabilization with pocket beach	Case-by-Case		
Complete or partial removal of boat ramp	SF of boat ramp		0.00
Removal of concrete debris	SF of concrete debris removed (see structure removal worksheet)	21.25	0.14
Complete or partial removal of marine railway	Case-by-Case		
Other	Case-by-Case		See Structure Removal Worksheet
<b>Mitigation Debit Sub-Total</b>			<b>8.95</b>

**OTHER CREDITING FACTORS**

If the project is located within a pocket estuary, bluff-backed beach, or pocket beach, enter Yes, otherwise No. <a href="#">Coastal Atlas Map</a>	Yes or No	no	0.00
If the project is located within a Major Estuary Zone (see Corps webpage for zone mapping), enter Yes, otherwise No. <a href="#">Major Estuary Zone Maps</a>	Yes or No	no	0.00

**Credit Purchase**

Mitigation Bank or In-Lieu-Fee Credit	Case-by-Case		
<b>TOTAL PROPOSED MITIGATION</b>			<b>8.95</b>

**Structure Removal Worksheet**

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Provide the details for each structure proposed for removal. Corps Project Managers or NFMS Biologist will use this information to calculate mitigation points based on Neashore Habitat Values Model.

	Constructed more than 25 years ago?	Type of structure	Shore Zone	Type of decking	Vegetation Scenario	Number of associated piles	Total SF of structure	SF of solid-decking	Located in forage fish spawning habitat	Located in Pocket Estuary?	Located in Major Estuary?
	(Yes or No)	(Pier, Float, Lift)	(USZ, LSZ, DSZ)	(solid, partial-grated, full-grated)	(0-3)				(Sand Lance, Surf Smelt, Herring)	(Yes or No)	(Yes or No)
1	No	Stairwell landing A	USZ	concrete	0	N/A	12.25	12.25	Herring	NO	No
2	No	Stairwell landing B	USZ	concrete	0	N/A	9	9	Herring	NO	NO
3	No	Stairwell A	Riparian Zone	Wooden/concrete	N/A	N/A	161	161	Herring	NO	NO
4	No	Stairwell B	Riparian Zone	Wooden	N/A	N/A	18	18	Herring	NO	NO
5	No	Two (2) Mooring Buoys	LSZ	N/A	0	N/A	40sf at substrate; plus shading of moored vessels	N/A	Herring	No	No
6	Joint-use structure with for five parcels protects the shoreline from further development at all involved properties in perpetuity.	Prevented pier, ramp, float at four (4) other shoreline parcels	USZ/LSZ	fully grated	unknown	unknown	unknown	unknown	Herring	no	no