

WASHINGTON STATE

Standard Hydraulic Project



AGENCY USE ONLY
Date Received: 2015-01-04
Application ID :1880
Online Submission
Olympia Admin reviewed application for complete submission

<p>01. Application Information</p>	<p>* Are you applying for a General HPA without specific project locations? Yes</p> <p>* Site Description: Washington State Ferry Terminal Structures in Skagit, Kitsap, Island, Snohomish, King, San Juan, Pierce, Jefferson Counties. See attachments for a map of Tidal Reference Areas and a table that lists the location of ferry terminals.</p> <p>* Application Type: Standard</p> <p>* Are you applying for a long-term HPA for agricultural irrigation or stock watering purposes under RCW 77.55.021 (9)(c)? No</p>
<p>02. Project Identification</p>	<p>* Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) Remove, Repair, and Replace Piles in Marine Waters (Ferry Terminals)</p> <p>* NonSimplified Project Type(s) (check all that apply): Overwater Structure,Other</p> <p>* Others: Ferry Terminal Maintenance Work</p>
<p>03. Applicant</p>	<p>* Business Name (if applicable) WSDOT</p> <p>* First Name Kojo</p> <p>* Last Name Fordjour</p> <p>* Address 1 2901 3rd Avenue Suite 500</p> <p>* City Seattle</p> <p>* State/Province WA</p> <p>* Zip Code (12345 or 12345-1234) 98102</p> <p>* Country United States</p>

	<p>* Primary Phone No (555-555-5555 Ext.) 206-515-3650</p>
04. Applicant Account Type	<p>* Email FordjoK@wsdot.wa.gov</p>
05. Authorized Agent or Contact	<p>* Please select one applicant account type Government – State</p>
	<p>* Business Name (if applicable) WSDOT</p>
	<p>* First Name Virginia</p>
	<p>* Last Name Stone</p>
	<p>* Address 1 310 Maple Park Drive SE</p>
	<p>* City Olympia</p>
	<p>* State/Province WA</p>
	<p>* Zip Code (12345 or 12345-1234) 98504-7331</p>
	<p>* Country United States</p>
	<p>* Primary Phone No (555-555-5555 Ext.) 360-704-6312</p>
	<p>* Email stonev@wsdot.wa.gov</p>
	<p>* Check here if Property Owner is the same as Applicant Yes</p>
	<p>* Business Name (if applicable) WSDOT</p>
	<p>* First Name Kojo</p>
	<p>* Last Name Fordjour</p>
	<p>* Address 1 2901 3rd Avenue Suite 500</p>
	<p>* City Seattle</p>
	<p>* State/Province WA</p>

* Zip Code (12345 or 12345-1234)

98102

* Country

United States

* Primary Phone No (555-555-5555 Ext.)

206-515-3650

* Email

FordjoK@wsdot.wa.gov

* Location

Site Name:

Work Start Date: Work End Date:

Address: , Island, WA, United States

Latitude: Longitude:

WRIA: Stream Number: Stream Name:

Parcel No: 100 Year Flood:

Drive Direction:

Site Name:

Work Start Date: Work End Date:

Address: , Jefferson, WA, United States

Latitude: Longitude:

WRIA: Stream Number: Stream Name:

Parcel No: 100 Year Flood:

Drive Direction:

Site Name:

Work Start Date: Work End Date:

Address: , King, WA, United States

Latitude: Longitude:

WRIA: Stream Number: Stream Name:

Parcel No: 100 Year Flood:

Drive Direction:

Site Name:

Work Start Date: Work End Date:

Address: , Kitsap, WA, United States

Latitude: Longitude:

WRIA: Stream Number: Stream Name:

Parcel No: 100 Year Flood:

Drive Direction:

Site Name:

Work Start Date: Work End Date:

Address: , Pierce, WA, United States

Latitude: Longitude:

07. Project Location

WRIA: Stream Number: Stream Name:
Parcel No: 100 Year Flood:
Drive Direction:

Site Name:
Work Start Date: Work End Date:

Address: , San Juan, WA, United States
Latitude: Longitude:

WRIA: Stream Number: Stream Name:
Parcel No: 100 Year Flood:
Drive Direction:

Site Name:
Work Start Date: Work End Date:

Address: , Skagit, WA, United States
Latitude: Longitude:

WRIA: Stream Number: Stream Name:
Parcel No: 100 Year Flood:
Drive Direction:

Site Name:
Work Start Date: Work End Date:

Address: , Snohomish, WA, United States
Latitude: Longitude:

WRIA: Stream Number: Stream Name:
Parcel No: 100 Year Flood:
Drive Direction:

* Will you be operating equipment in water?

Yes

* Type of equipment used

Crane, impact hammer, vibratory hammer, siphon dredge, hand tools, barges, and boats.

* Summarize the overall project.

WSDOT needs to replace, repair, or remove up to 50 marine piles per ferry terminal a year to maintain the structural integrity. Piles need to be repaired or replaced when damaged by the natural process of deterioration (rotting wood or rusting metal), marine larvae (tunneling through timber piles), or damage inflicted by an errant ferry vessel. Some piles may be removed if a structure is no longer used.

* Describe how you plan to construct each project element. Include specific construction methods and equipment to be used. Identify where each element will occur in relation to the nearest waterbody. Indicate which activities are within the 100-year flood plain..

Pile repair, replacement, or removal activities require in water work within the Puget Sound or the shoreline of the Puget Sound. The preferred method to address damaged piles is replacement. Although WSDOT prefers to install new piling, sometimes WSDOT repairs piles by stubbing or encasing due to the condition or the location of the pile. For example, it can be difficult to remove a pile that supports a building or a parking or loading area on a trestle. We encase piles as a temporary measure to protect the structural integrity of ferry terminals. Encasing is used when the pile still

08. Project Description

retains some load-bearing capacity. See section 2.1 of the attached WSF Biological Assessment Reference Document for piling removal, repair, and installation methods including a description of construction methods and equipment used (pages 25 - 34). Note that encasing and encapsulating piles refers to the same process.

WSDOT will follow the most current version of the Environmental Compliance Assurance Procedure (see ECAP attachment) in the Construction Manual (1-2.2K(1)).

* Requested Project Start Date:

02/18/2015

* Requested Project End Date:

02/18/2020

* Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment.

WSDOT will use conservation measures as outlined in the attached Biological Assessment reference (section 2.3) to prevent adverse impacts to waterbodies while replacing, repairing, and removing piles from marine waters. We will follow established Tidal Reference Area (TRA) work windows to avoid in-water work when juvenile salmonids and ESA-listed species are most likely to be present. Additionally, WDFW may restrict work times if forage fish spawning is known to occur near the terminal.

WSF staff or its contractors will be advised that eelgrass (*Zostera marina* L.) beds are protected under local, state, and federal law. WSF and its contractors shall exercise extreme caution when working in the area indicated on the plans as "Eelgrass Beds." WSF and its contractors shall not:

- Place derrick spuds or anchors in the area designated as "Eelgrass."
- Shade the eelgrass beds for a period of time greater than 3 consecutive days during the growing season (generally March through September).
- Perform activities that could cause significant levels of sediment to cover the eelgrass beds.
- Conduct activities that may cause scouring of sediments within the eelgrass beds or other types of sediment transfer out of or into the eelgrass beds.

WSF and its contractors will follow these additional general conservation measures for all activities associated with this work. These measures include:

- Prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan that outlines best management practices (BMPs) and responsive actions in the event of a spill or release, and notification and reporting procedures. The SPCC shall also outline contractor management elements such as personnel responsibilities, project site security, site inspections, and training.
- Prevent discharge of oil, fuels, cleaning solvents, or chemicals to surface waters, or onto land where there is a potential for reentry into surface waters.
- Regularly check fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc. for leaks, and shall maintain and store materials properly to prevent spills.
- Prevent petroleum products, fresh cement, lime, concrete, chemicals, or other toxic or deleterious materials from entering surface waters.
- Comply with water quality standards imposed by Ecology (Chapter 173-201A WAC), which specify a mixing zone beyond which water quality standards cannot be exceeded. Compliance with Ecology's standards is intended to ensure that fish and aquatic life are being protected to the extent feasible and practicable.
- Use vibratory pile driving instead of impact whenever possible to protect fish life.
- Restrict barge operations to tide elevations adequate to prevent grounding.
- Maintain equipment that enters surface waters to prevent any visible sheen from petroleum products appearing on the water.
- All lumber will meet or exceed the standards established in the most recent version of 'Best Management Practices For the Use of Treated Wood in Aquatic and Wetland Environments'
- Ensure that wet concrete does not come in contact with marine waters.

Additional conservation measures for creosote-treated timber piles

09. Waterbodies
(other than wetlands):
Impacts and
Mitigation

- Construct sea forms for concrete structures that prevent leaching of wet concrete.
- Retrieve any floating debris generated during construction. Remove debris in the containment boom will be removed by the end of the work day or when it is removed, whichever occurs first. Retrieved debris will be disposed of at an upland disposal site.
- Contain debris during activities that generate sawdust, drill tailings, or wood chips from treated timbers are conducted, tarps or other containment material shall be used to prevent debris from entering the water. If tarps cannot be used, a containment boom will be placed around the work area to capture debris and cuttings.
- Avoid disposing or abandoning excess or waste materials waterward of ordinary high water mark or into waters of the state.

* Will your project impact a waterbody or the area around a waterbody?

Yes

* Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies?

NA

* Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies?

A separate compensatory mitigation plan is not necessary because impacts associated with this hydraulic project are adequately avoided, minimized, rectified and reduced (see paragraphs below). Pile maintenance prevents trestles, dolphins, and other ferry terminal overwater structures from falling and entering the Puget Sound.

We avoid and minimize impacts by choosing the least environmentally impacting method to fix damaged piles as described in the construction methods and first question in the waterbodies section of this application. Creosote-treated timber piles contain polycyclic aromatic hydrocarbons (PAHs) and other chemicals that leach into the Puget Sound and adversely affect the aquatic environment. Studies indicate that creosote exposure causes a high mortality rate in herring eggs and reduces the growth and immune function for juvenile salmonids. See the attached DNR flyer "Removing creosote-treated materials from Puget Sound and its beaches" for more information.

We rectify and reduce the impacts of leached PAH's and other chemicals by removing creosote-treated timber when replacing or repairing them during preservation and maintenance operations. When it's not feasible to replace or stub a pile, we encase the pile. Concrete or resin used for encasement seals the creosote-treated timber piles so they don't leach chemicals; thereby providing better protection for fish life. A later preservation project will remove the encased pile and replace it with another pile. Washington State Ferries has removed over 6,500 tons of creosote-treated wood from ferry terminals in the Puget Sound/Georgia Basin since 2000.

A mitigation plan isn't required because the project itself rectifies existing impacts (leaching). BMPs and other methods will be used to avoid and minimize adverse impacts. The proposed improvements adequately compensate for the minor decrease in benthic habitat from pile repair. Pile maintenance, removal or repair results in overall improvements to fish life beyond existing conditions.

* Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

N/A

* Describe the source and nature of any fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody.

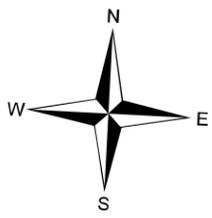
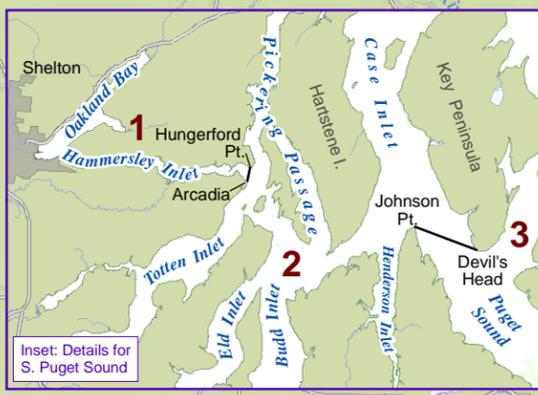
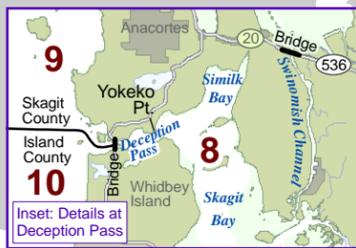
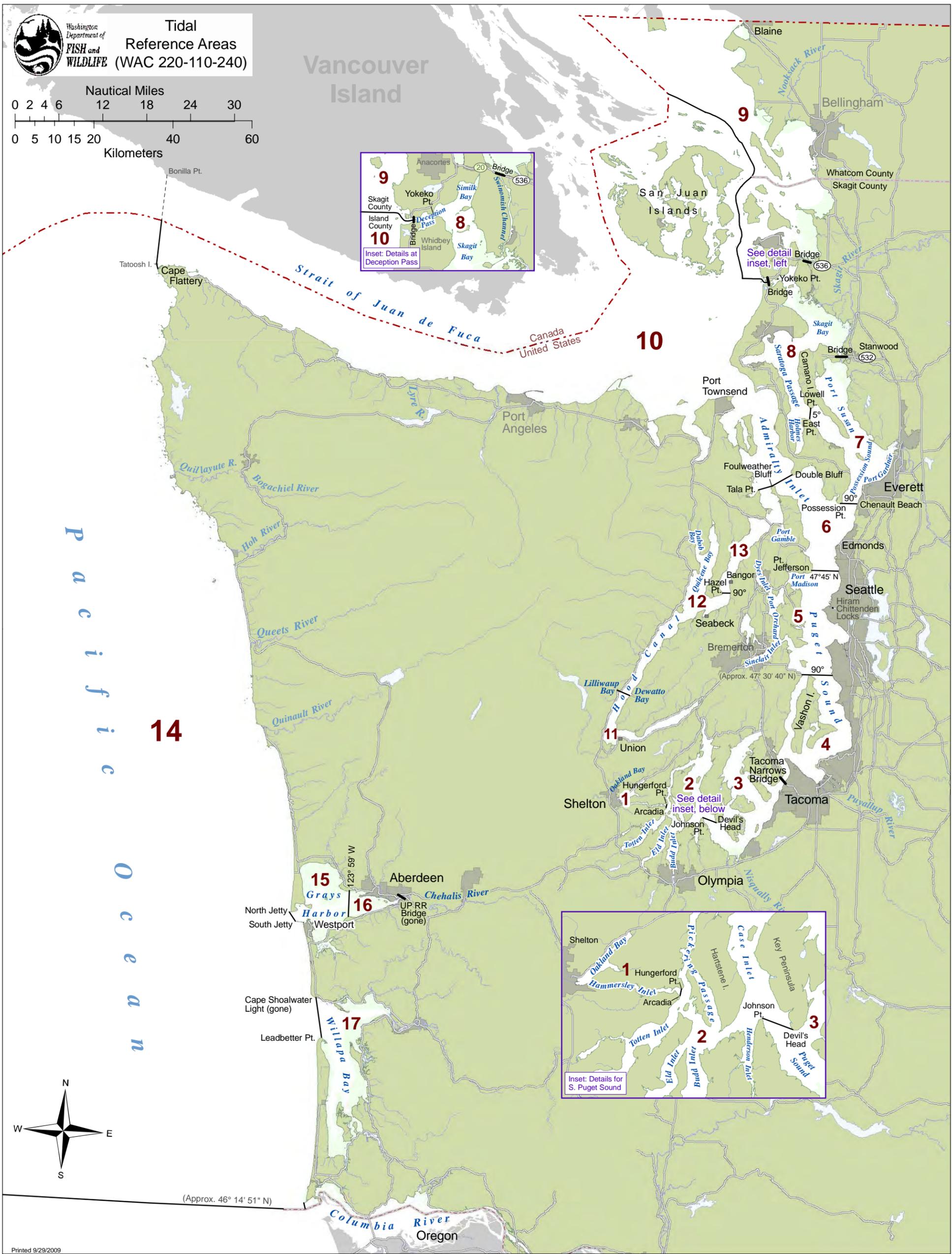
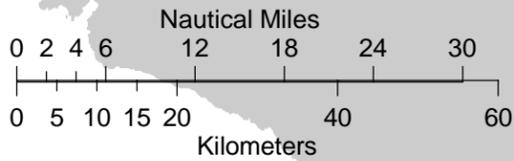
Fill material may include native material removed from the hole or around the pile (doesn't include sediment around creosote-treated timber piles), sand used to cap areas where a pile is removed and not replaced; or concrete when used to stub a new pile onto an existing one at the bed level. The amount of fill in the water body varies, but it is typically less than one square yard per pile. See the construction methods for in the Biological Assessment Guidance for how and where fill will be placed in the waterbody (section 2.1).

	<p>* For all excavating or dredging activities, describe the method for excavating or dredging type and amount of material you will remove, and where the material will be disposed.</p> <p>Excavation of small amounts of sediment around the base of piles may be required. Methods of excavation include the use of a siphon dredge, hand tools, or clam shovel. Pile removal may be done using a vibratory machine or direct pulling with a clam shovel. All creosote-treated timber piles and associated sediment will be disposed of in an approved upland site.</p>
10. SEPA Compliance	<p>* Compliance with the State Environmental Policy Act (SEPA). For more information about SEPA, go to "http://www.ecy.wa.gov/programs/sea/sepa/e-review.html"</p> <p>This project is exempt. I will upload, mail, or deliver a draft of the SEPA Letter of Exemption as part of this application.</p> <p>* Choose Type Of Exemption.</p> <p>Categorical Exemption</p> <p>* Under what section of the SEPA administrative code (WAC) is it exempt?</p> <p>WAC 468-12-800(1)(u)</p>
11. Application Fee Exemption	<p>* Do not qualify for an application fee exemption.</p> <p>Yes</p>



Washington Department of **FISH and WILDLIFE** (WAC 220-110-240)

Tidal Reference Areas



(Approx. 46° 14' 51" N)

Printed 9/29/2009

Tidal reference areas are defined as follows:

- (1) Tidal Reference Area 1 (Shelton): All saltwater areas in Oakland Bay and Hammersley Inlet westerly of a line projected from Hungerford Point to Arcadia.
- (2) Tidal Reference Area 2 (Olympia): All saltwater areas between a line projected from Hungerford Point to Arcadia and a line projected from Johnson Point to Devil's Head. This includes Totten, Eld, Budd, Case and Henderson Inlets, and Pickering Passage.
- (3) Tidal Reference Area 3 (South Puget Sound): All saltwater areas easterly and northerly of a line projected from Johnson Point to Devil's Head and southerly of the Tacoma Narrows Bridge.
- (4) Tidal Reference Area 4 (Tacoma): All saltwater areas northerly of the Tacoma Narrows Bridge and southerly of a line projected true west and true east across Puget Sound from the northern tip of Vashon Island.
- (5) Tidal Reference Area 5 (Seattle): All saltwater areas northerly of a line projected true west and true east across Puget Sound from the northern tip of Vashon Island and southerly of a line projected true east from Point Jefferson at 47° 15' N. latitude across Puget Sound. This area includes Port Orchard, Port Madison, and Dyes and Sinclair Inlets.
- (6) Tidal Reference Area 6 (Edmonds): All saltwater areas northerly of a line projected true east from Possession Point to Chenault Beach and from Foulweather Bluff to Double Bluff.
- (7) Tidal Reference Area 7 (Everett): All saltwater areas northerly of a line projected true east from Possession Point to Chenault Beach, easterly of a line projected 5° true from East Point to Lowell Point, and southerly of the Stanwood to Camano Island Highway. This area includes Port Gardner, Port Susan, and parts of Possession Sound and Saratoga Passage.
- (8) Tidal Reference Area 8 (Yokeko Point): All saltwater area westerly and northerly of a line projected 5° true from East Point to Lowell Point, north of the Stanwood to Camano Island Highway, and easterly and southerly of Deception Pass Bridge and the Swinomish Channel Bridge on State Highway 536. This area includes Holmes Harbor, Saratoga Passage, Skagit Bay, Similk Bay, and most of the Swinomish Channel.
- (9) Tidal Reference Area 9 (Blaine): All saltwater area in Skagit County and Whatcom County that lies northerly of the Swinomish Channel Bridge on State Highway 536 and westerly and northerly of Deception Pass Bridge.
- (10) Tidal Reference Area 10 (Port Townsend): All saltwater area of Puget Sound as defined in WAC 220-16-210 except Hood Canal south of a line projected from Tala Point to Foulweather Bluff, and except all waters defined in Tidal Reference Areas 1 through 9. Area 10 includes waters of the San Juan Islands, Admiralty Inlet, the Strait of Juan de Fuca, and associated bays and inlets.
- (11) Tidal Reference Area 11 (Union): All saltwater area of Hood Canal southerly and easterly of a line projected from Lilliwaup Bay to Dewatto Bay.
- (12) Tidal Reference Area 12 (Seabeck): All saltwater areas of Hood Canal northerly of a line projected from Lilliwaup Bay to Dewatto Bay and southerly of a line projected true east from Hazel Point. This area includes Dabob Bay and Quilcene Bay.
- (13) Tidal Reference Area 13 (Bangor): All saltwater area of Hood Canal northerly of a line projected true east from Hazel Point and south of a line projected from Tala Point to Foulweather Bluff. This area includes Port Gamble.
- (14) Tidal Reference Area 14 (Ocean Beaches): All saltwater area between Cape Flattery and the Oregon border at the mouth of the Columbia River, excluding Grays Harbor and Willapa Bay.
- (15) Tidal Reference Area 15 (Westport): All saltwater area in Grays Harbor easterly of a line projected from the outermost end of the north jetty to the outermost end of the south jetty, and westerly of 123° 59' W. longitude.
- (16) Tidal Reference Area 16 (Aberdeen): All saltwater area in Grays Harbor easterly of 123° 59' W. longitude and westerly of the Union Pacific railroad bridge across the Chehalis River.
- (17) Tidal Reference Area 17 (Willapa Bay): All saltwater area in Willapa Bay easterly of a line projected from Leadbetter Point to Cape Shoalwater Light.

[Statutory Authority: RCW 75.08.080, 94-23-058 (Order 94-160), § 220-110-240, filed 11/14/94, effective 12/15/94. Statutory Authority: RCW 75.20.100 and 75.08.080, 83-09-019 (Order 83-25), § 220-110-240, filed 4/13/83.]

Ferry Terminals and Locations



Terminal	County	Latitude	Longitude	Section	Township	Range	WRIA	TRA
Anacortes	Skagit	48.50706	-122.67748	22	35N	1E	3	8
Bainbridge Island	Kitsap	47.6225	-122.51028	26	25N	2E	15	5
Bremerton	Kitsap	47.512001	-122.497	24	24N	1E	15	5
Clinton	Island	47.97536	-122.34966	30	29N	4E	6	7
Eagle Harbor	Kitsap	47.622222	-122.51	26	25N	2E	15	5
Edmonds	Snohomish	47.813056	-122.38444	23	27N	3E	8	6
Fauntleroy	King	47.52318	-122.39595	35	24N	3E	9	5
Friday Harbor	San Juan	48.53563	-123.01396	13	35N	3W	2	10
Keystone	Island	48.15907	-122.67264	22	31N	1E	6	10
Kingston	Kitsap	47.794998	-122.495	25	27N	2E	15	6
Lopez Island	San Juan	48.570487	-122.88359	36	36N	2W	2	10
Mukilteo	Snohomish	47.94945	-122.3048	4	28N	4E	7	7
Orcas	San Juan	48.59733	-122.94354	22	36N	2W	2	10
Point Defiance	Pierce	47.306	-122.514	14	21N	2E	12	4
Port Townsend	Jefferson	48.111	-122.759	11	30N	1W	17	10
Seattle	King	47.6025	-122.33806	6	24N	4E	8	5
Shaw	San Juan	48.584	-122.929	27	36N	2W	2	10
Southworth	Kitsap	47.512778	-122.495	1	23N	2E	15	5
Tahlequah	King	47.33202	-122.5077	2	21N	2E	15	4
Vashon	King	47.51038	-122.46376	6	23N	3E	15	4

Ferry Terminal Structures

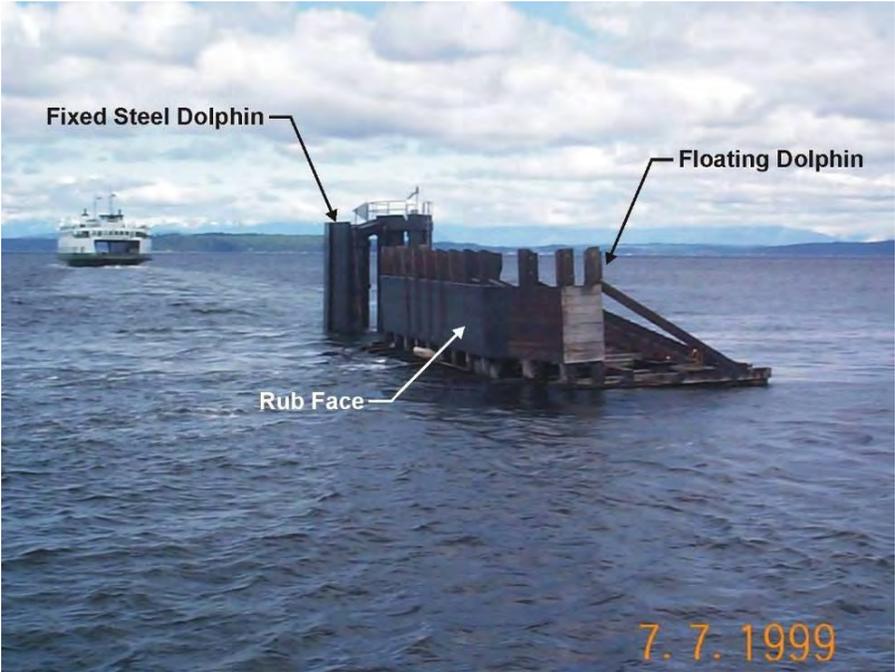


Typical Ferry Terminal, Aerial View

Ferry Terminal Structures



Typical Timber Ferry Terminal



Floating Dolphin and Fixed Steel Pile Dolphin

(For Remove and Replace Piles at Ferry Terminal GHPA submittal by WSDOT)