



2009

WASHINGTON STATE Joint Aquatic Resources Permit Application (JARPA) Form [\[help\]](#)

AGENCY USE ONLY

Date received:

Agency reference #: 119181 _____

Tax Parcel #(s): _____

Use black or blue ink to enter answers in white spaces below, or fill in electronically by clicking on fields

ANSWERS IN AREAS HIGHLIGHTED ARE NOT REQUIRED

Part 1—Project Identification

Unique project information that makes it easy to identify. [\[help\]](#)

1a. Unique Project Identifier Number (UPI #) [\[help\]](#)

- Don't have one yet? Get one at <http://www.epermitting.wa.gov> or call the Washington Governor's Office of Regulatory Assistance at (800) 917-0043.

1b. Project Name (Examples: Smith's Dock or Seabrook Lane Development) [\[help\]](#)

Remove and Replace Piles

Part 2—Applicant

The person or organization legally responsible for the project. [\[help\]](#)

2a. Name (Last, First, Middle) and Organization (if applicable)

Washington State Department of Transportation Attn: Eric Wolin

2b. Mailing Address (Street or PO Box)

310 Maple Park Drive SE

2c. City, State, Zip

Olympia WA 98504-7331

2d. Phone (1)

2e. Phone (2)

2f. Fax

2g. E-mail

(360) **704-6327**

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schlatk@wsdot.wa.gov

Part 3—Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b. of this application.) [\[help\]](#)

3a. Name (Last, First, Middle) and Organization (if applicable)

3b. Mailing Address (Street or PO Box)

3c. City, State, Zip

3d. Phone (1)

3e. Phone (2)

3f. Fax

3g. E-mail

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Part 4–Property Owner(s) [\[help\]](#)

Contact information for people or organizations owning the property(ies) where the project will occur. [\[help\]](#)

- Same as applicant. (Skip to Part 5.)
- Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)
- There are multiple property owners. Complete the section below and use [JARPA Attachment A](#) for each additional property owner.

4a. Name (Last, First, Middle) and Organization (if applicable)			
N/A			
4b. Mailing Address (Street or PO Box)			
N/A			
4c. City, State, Zip			
N/A			
4d. Phone (1)	4e. Phone (2)	4f. Fax	4g. E-mail
() N/A	()	()	

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [\[help\]](#)

- There are multiple properties or project locations (e.g., linear projects). Complete the section below and use [JARPA Attachment B](#) for each additional property.

5a. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5n.) [help]			
Ferry terminal structures statewide.			
5b. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Throughout western Washington (see Attachment 1).			
5c. County [help]			
Skagit, Kitsap, Island, Snohomish, King, San Juan, Pierce, Jefferson			
5d. Provide the section, township, and range for the project location. [help]			
¼ Section	Section	Township	Range
See Attachment 2	See Attachment 2	See Attachment 2	See Attachment 2
5e. Provide the latitude and longitude of the project location. [help]			
<ul style="list-style-type: none"> Example: 47.03922 N lat. / -122.89142 W long 			
See Attachment 2			
5f. List the tax parcel number(s) for the project location. [help]			
<ul style="list-style-type: none"> The local county assessor's office can provide this information. 			
5g. Indicate the type of ownership of the property. (Check all that apply.) [help]			
<input type="checkbox"/> State Owned Aquatic Land <input type="checkbox"/> Tribal <input type="checkbox"/> Private <input checked="" type="checkbox"/> Other publicly owned (federal, state, county, city, special districts like schools, ports, etc.)			

5h. Contact information for all adjoining property owners, lessees, etc. (If you need more space, use [JARPA Attachment C.](#)) [\[help\]](#)

Name	Mailing Address	Tax Parcel # (if known)

5i. Is any part of the project area within a 100-year flood plain? [\[help\]](#)

Yes No Don't know

5j. Briefly describe the vegetation and habitat conditions on the property. [\[help\]](#)

5k. Describe how the property is currently used. [\[help\]](#)

Ferry terminals.

5l. Describe how the adjacent properties are currently used. [\[help\]](#)

5m. Describe the structures (above and below ground) on the property, including their purpose(s). [\[help\]](#)

Ferry terminals include terminal building, transfer span, towers, wingwalls, dolphins, and other supporting structures for loading vehicles and pedestrians onto a ferry. See Attachments 3.

5n. Provide driving directions from the closest highway to the project location, and attach a map. [\[help\]](#)

N/A

Part 6–Project Description

6a. Summarize the overall project. You can provide more detail in 6d. [\[help\]](#)

The work entails removing and replacing; removing; or repairing pilings at WSDOT operated ferry terminals.

6b. Indicate the project category. (Check all that apply.) [\[help\]](#)

- Commercial Residential Institutional Transportation Recreational
 Maintenance Environmental Enhancement

6c. Indicate the major elements of your project. (Check all that apply.) [\[help\]](#)

<input type="checkbox"/> Aquaculture	<input type="checkbox"/> Culvert	<input type="checkbox"/> Float	<input type="checkbox"/> Road
<input type="checkbox"/> Bank Stabilization	<input type="checkbox"/> Dam / Weir	<input type="checkbox"/> Geotechnical Survey	<input type="checkbox"/> Scientific Measurement Device
<input type="checkbox"/> Boat House	<input type="checkbox"/> Dike / Levee / Jetty	<input type="checkbox"/> Land Clearing	<input type="checkbox"/> Stairs
<input type="checkbox"/> Boat Launch	<input type="checkbox"/> Ditch	<input type="checkbox"/> Marina / Moorage	<input type="checkbox"/> Stormwater facility
<input type="checkbox"/> Boat Lift	<input type="checkbox"/> Dock / Pier	<input type="checkbox"/> Mining	<input type="checkbox"/> Swimming Pool
<input type="checkbox"/> Bridge	<input type="checkbox"/> Dredging	<input type="checkbox"/> Outfall Structure	<input type="checkbox"/> Utility Line
<input type="checkbox"/> Bulkhead	<input type="checkbox"/> Fence	<input type="checkbox"/> Piling	
<input type="checkbox"/> Buoy	<input checked="" type="checkbox"/> Ferry Terminal	<input type="checkbox"/> Retaining Wall (upland)	
<input type="checkbox"/> Channel Modification	<input type="checkbox"/> Fishway		

Other: _____

6d. Describe how you plan to construct each project element checked in 6c. Include specific construction methods and equipment to be used. [\[help\]](#)

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year flood plain.

Piling Removal

Direct Pull: The direct pull method is generally used to remove timber pilings. Each piling is wrapped with a choker cable or chain that is attached at the top to a crane. The crane then pulls the piling directly upward, removing the piling from the sediment.

Vibratory Extraction: Vibratory extraction is a common method for removing both steel and timber pilings. The vibratory hammer is a large mechanical device (5-16 tons) that is suspended from a crane by a cable. The hammer is activated to loosen the piling, and it vibrates while the crane pulls up. As the piling is extracted and the tip of the piling reaches the mud line, the vibratory hammer is shut off and the crane lifts the piling vertically onto the barge. Vibratory extraction takes about 15 to 30 minutes per piling, depending on piling length and sediment conditions.

Clamshell Removal: Broken and damaged pilings are removed with a clamshell bucket. If not removed, broken pilings and piling stubs can interfere with the installation of new piling, causing construction delays. The clamshell bucket is a hinged steel apparatus that operates like a set of steel jaws. The bucket is lowered from a crane and the jaws grasp the piling stub as the crane pulls up. The broken pilings and stubs are loaded onto the barge for offsite disposal. The size of the clamshell bucket is minimized to reduce turbidity during piling removal.

Piling Installation

There are two methods for installing pilings: vibratory hammer installation and impact hammer installation. Each method is described below: The method of installation depends on soil type, structure type, and the type of piling being installed. In general, vibratory hammers are used more frequently, but impact hammer installation is often used in conjunction with the vibratory hammer.

Impact Hammer Installation: An impact hammer is a large steel device that is suspended by cable attached to a crane. An impact hammer has a lead that holds the hammer and piling in place while a heavy rod moves up and down, much like a piston, striking the surface of the piling and embedding it in the soil.

Vibratory Hammer Installation: The vibratory hammer method is a common technique used to install pilings where soils allow. Vibratory piling installation involves placing a choker cable around the piling and lifting it into vertical position with the crane. The piling is then lowered into position and set in place at the mud line. The piling is held steady while the vibratory hammer installs the piling to the required tip elevation. The combination of the weight and the vibration of the hammer pushes the piling deep below the mud line.

WSDOT is not requesting coverage for the proofing of steel pilings. Projects that need to proof steel pilings must apply for coverage under an individual GHPA.

Piling Encasement

Piling encasement is used to prolong the life of damaged or decaying pilings. Under these conditions pilings may be repaired by encasing them in concrete. This method involves encasing the damaged piling in concrete using a fabric, steel, or fiberglass form. Encasement can restore the structural integrity of the piling and protect against further damage. Typically this process would be performed on less than 15 piles at a given terminal in a given year.

Pilings to be repaired by piling encasement are first cleaned of loosely adhering marine organisms by scraping the pilings with hand tools (marine growth removal was approved in the Programmatic GHPA Log# GH-D9448-01. Reinforcing steel is then installed around the piling prior to installation of the form. A form is then wrapped around the entire piling and set in the sediment. Concrete is then poured inside the form. The concrete pour is stopped once the concrete reaches a level below the top of the piling to prevent spillage of wet concrete into the water.

Piling Stubbing

Although installing new piling to make repairs beneath a trestle is generally the preferred method of repair, piling stubbing is sometimes required and is the only feasible option when a piling under a trestle or dock requires repair and

when cutting a hole and installing a piling through the trestle is not feasible (e.g., buildings on top of the trestle preclude installing piling through an existing trestle).

The process for piling stub repairs involves cutting and removing the damaged timber piling between the mud line and the underside of the piling cap. A new section of an ACZA-treated piling is then inserted between the piling stub and the cap. There are two methods used to provide the connection at the mud line. The first method involves a concrete collar. Reinforcing steel is installed around the piling prior to installation of the form. The joint is fitted with a steel or plastic form and the form is then filled with concrete. The form must extend 30 inches below and above the seam of the two timber piling sections, often requiring the excavation of small amounts of sediment around the base of the piling. WSF will use either hand digging if appropriate, or siphon dredging to remove the necessary material from around the piling to complete the repair. Concrete is then pumped into the steel form to fill the void between the collar and the piling. Concrete is poured through a small-diameter flexible hose called a tremie. The mouth of the tremie hose is placed at the bottom of the form to prevent splashing or accidental spillage of concrete. The form is filled to within approximately 6 inches of the top of the form to prevent overflow. Once the concrete is poured, filter fabric or sand is placed on top of the curing concrete to allow the concrete to set as long as possible before it is inundated during the next high tide. The form and fabric or sand prevents wet concrete from contacting marine water during the curing process. For engineering purposes, it is important to prevent mixing between salt water and concrete because salt water causes defects in the concrete once it cures. Filter fabric placed over the top of the form helps contain any minimal plume that may occur from the concrete pour.

The second method is similar to the first method except a structural steel collar is used around the splice location. This method still requires the forms to extend 30 inches below and above and excavation for access. This method also requires that both the original remaining pile and the new stubbed portion of the pile be of the same diameter.

6e. What are the start and end dates for project construction? (month/year) [\[help\]](#)

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start date: **Upon issuance of the GHPA** End date: **Five years from issuance of permit**

6f. Describe the purpose of the work and why you want or need to perform it. [\[help\]](#)

This work is required to insure the structural integrity of the various components of a ferry terminal that include piles. Piles may need to be replaced or repaired due to the natural process of deterioration (rotting wood or rusting metal) or due to damage inflicted by an errant ferry vessel. Some piles may be removed if a structure is no longer used.

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

6h. Will any portion of the project receive federal funding? [\[help\]](#)

- If **yes**, list each agency providing funds.

Yes No Don't know

Part 7–Wetlands: Impacts and Mitigation

- Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [\[help\]](#)

Not applicable

7b. Will the project impact wetlands? [\[help\]](#)

Yes No Don't know

7c. Will the project impact wetland buffers? [\[help\]](#)

Yes No Don't know

7d. Has a wetland delineation report been prepared? [\[help\]](#)

- If **yes**, submit the report, including data sheets, with the JARPA package.

Yes No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [\[help\]](#)

- If **yes**, submit the wetland rating forms and figures with the JARPA package.

Yes No Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [\[help\]](#)

- If **yes**, submit the plan with the JARPA package.

Yes No Not applicable

7g. Use the table below to list the type and rating of each wetland that will be impacted; the extent and duration of the impact; and the type and amount of compensatory mitigation proposed. If you are submitting a compensatory mitigation plan with a similar table, you may simply state (below) where we can find this information in the mitigation plan. [\[help\]](#)

Activity causing impact (fill, drain, excavate, flood, etc.)	Wetland type and rating category ¹	Impact area (sq. ft. or acres)	Duration of impact ²	Proposed mitigation type ³	Wetland mitigation area (sq. ft. or acres)

¹ Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

² Indicate the time (in months or years, as appropriate) the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

³ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available:

7h. For all filling activities identified in 7g., describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [\[help\]](#)

7i. For all excavating activities identified in 7g., describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [\[help\]](#)

7j. Summarize what the compensatory mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [\[help\]](#)

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, “waterbodies” refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [\[help\]](#)

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [\[help\]](#)

Not applicable

Conservation Measures for All Activities

- WSDOT will have at least one WSDOT inspector on site during construction for WSDOT projects. The role of the inspector is to ensure contract and permit compliance. The inspector and the contractor each have a copy of Contract Plans and Specifications, which contain all permit requirements.
- Timing restrictions will be imposed to avoid in-water work when salmonids are most likely to be present. Work in marine water is typically restricted from February 15 to July 15 for the protection of bull trout, and March 15 to July 15 for the protection of Puget Sound Chinook salmon. Work will be conducted during the current standard in-water work windows established by WDFW.
- WSDOT will comply with water quality restrictions imposed by the Washington State Department of Ecology (Chapter 173-201A WAC), which specifies a mixing zone beyond which water quality standards cannot be exceeded. Compliance with Ecology’s standards are intended to ensure that fish and aquatic life are being protected to the extent feasible and practical.
- Any floating debris generated during construction will be retrieved using a skiff and a net. Debris will be disposed of upland.
- Excess or waste materials will not be disposed of or abandoned waterward of ordinary High Water (OHW) or allowed to enter waters of the state.
- The contractor will be responsible for the preparation of a Spill Prevention, Control, and Countermeasures (SPCC) Plan to be used for the duration of the project. The Plan will be submitted to the Project Engineer prior to the commencement of any construction activities. The contractor will maintain a copy of the Plan with any updates at the work site.

The SPCC Plan will identify construction planning elements and recognize potential spill sources at the site. The Plan will outline responsive actions in the event of a spill or release and will identify notification and reporting procedures. The Plan will also outline contractor management elements such as personnel responsibilities, project site security, site inspections, and training.

The SPCC Plan will outline what measures the contractor will take to prevent the release or spread of hazardous materials, either found on the site and encountered during construction but not identified in contract documents, or

any hazardous materials that the contractor stores, uses, or generates on the construction site during construction activities. These items include, but are not limited to, gasoline, oils, and chemicals. Hazardous materials are defined in RCW 70.105.010 under "hazardous substance."

The contractor will maintain the applicable equipment and material designated in the SPCC Plan at the job site.

- The contractor will be advised that eelgrass (*Zostera marina* L.) beds are protected under both state and Federal laws. The contractor will adhere to the following restrictions during the life of the contract. The contractor will be provided with a map delineating eelgrass boundaries. The contractor will not:
 - Place derrick spuds or anchors in the areas designated as "Eelgrass"
 - Shade the eelgrass beds for a period of time greater than three consecutive days during the growing season from March 1 until August 31
 - Conduct activities that may cause scouring of sediments within the eelgrass beds or result in sediments transferring out of or into the eelgrass bed.

Additional Conservation Measures for the Removal and Installation of Pilings

- All creosote-treated material, piling stubs, and associated sediments shall be disposed of by the contractor in a landfill which meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC. The contractor will provide receipts of disposal to the WSDOT Project Engineer.
- Creosote-treated piling, stubs, and associated sediments (if any) shall be contained in a storage area consisting of a row of hay or straw bales, or filter fabric, placed around the perimeter to help prevent sediment-laden water from running off the work area.
- If piling are to remain in place due to the inability to remove the imbedded portion of the piling a fabric cap is installed over the pile.
- Piling that break or are already broken below the waterline will be removed with a clamshell bucket. The size of the clamshell will be sized appropriately to minimize disturbance to bottom sediments (e.g., it grabs the piling, but not the sediment). The clamshell bucket shall be emptied of material on a contained area on the barge before it is lowered into the water.
- An oil containment boom surrounding the work area will be used during piling removal. The boom will also serve to collect any floating debris. Oil absorbent materials shall be employed if visible product is observed. The boom shall remain in place until all oily material and floating debris has been collected and sheens have dissipated. Used oil absorbent materials will be disposed of in a landfill that meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC.
- Whenever activities will generate sawdust, drill tailings or wood chips from treated timbers, tarps or other containment material shall be used to prevent debris from entering the water. If tarps cannot be used (because of the location or type of structure) a containment boom will be placed around the work area to capture debris and cuttings. Any debris in the containment boom shall be removed by the end of the workday or when the boom is removed, whichever occurs first. Captured material shall be disposed of in an upland disposal site.
- If concrete is used to fill a piling (depending on structural needs) the contractor will be required to ensure that uncured concrete will not come into contact with marine water.
- If beach access is required, use of equipment on the beach area shall be held to a minimum and confined to designated access corridors that minimize foot traffic on the upper beach.
- If beach access is required, area depressions created during project activities will be reshaped to pre-project beach levels upon project completion.

Conservation Measures for Piling Encasement

- The contractor will be required to ensure that uncured concrete will not come into contact with marine water.
- Hand tools or a siphon dredge will be used to excavate around pilings to be replaced.

Conservation Measures for Piling Stubbing

- Hand tools or a siphon dredge will be used to excavate around pilings to be replaced.
- Creosote-treated timber will not be used where it can come into contact with the water, therefore reducing the amount of creosote-treated timber remaining in the marine environment.
- ACZA-treated wood will be treated using the most recent version of *Best Management Practices for the Use of Treated Wood in Aquatic Environments* developed by the Western Wood Preservers Institute.
- All creosote-treated material, piling stubs, and associated sediments shall be disposed of by the contractor in a landfill which meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC. The contractor will provide receipts of disposal to the WSDOT Project Engineer.

8b. Will your project impact a waterbody or the area around a waterbody? [\[help\]](#)

Yes No

8c. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity causing impact (clear, dredge, fill, pile drive, etc.)	Waterbody name	Impact location ¹	Duration of impact ²	Amount of material to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Removing, replacing, or repairing piles below the OHWM in marine waters.	TRA 4 TRA 5 TRA 6 TRA 7 TRA8 TRA 10	Varies	Short term	Varies (minimal).	Varies, but typically less than one (1) square yard per pile.

¹ Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

² Indicate the time (in months or years, as appropriate) the waterbody will be measurably impacted by the work. Enter “permanent” if applicable.

8d. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [\[help\]](#)

- If yes, submit the plan with the JARPA package.

Yes No **Not applicable**

8e. Summarize what the compensatory mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7j., you do not need to restate your answer here. [\[help\]](#)

N/A

8f. For all activities identified in 8c., describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [\[help\]](#)

Fill material may include native material removed from the hole or around the pile, 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 (see attachment 4).

8g. For all excavating or dredging activities identified in 8c., describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

Methods of excavation include the use of a siphon dredge, hand tools, or clam shovel. Pile removal may also be done using a vibratory machine or direct pulling with a clam shovel.

Part 9—Additional Information

Any additional information you can provide helps the reviewer(s) understand your project.

9a. If you have already worked with any government agencies on this project, list them below. [\[help\]](#)

Agency Name	Contact Name	Phone	Most Recent Date of Contact
N/A		()	
		()	
		()	

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 on the Washington Department of Ecology's 303(d) List? [\[help\]](#)

- If **yes**, list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: <http://www.ecy.wa.gov/programs/wq/303d/>.

Yes No

See Attachment 5

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [\[help\]](#)

- Go to <http://cfpub.epa.gov/surf/locate/index.cfm> to help identify the HUC.

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [\[help\]](#)

- Go to <http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm> to find the WRIA #.

WRIA 2, 3, 6, 7, 8, 9, 12, & 15

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [\[help\]](#)

- Go to <http://www.ecy.wa.gov/programs/wq/swqs/criteria.html> for the standards.

Yes No Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [\[help\]](#)

- If you don't know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

Rural Urban Natural Aquatic Conservancy Other _____

<p>9g. What is the Washington Department of Natural Resources Water Type? [help]</p> <ul style="list-style-type: none"> Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.
<p> <input type="checkbox"/> S <input type="checkbox"/> F <input type="checkbox"/> Np <input type="checkbox"/> Ns N/A – Marine Waters </p>
<p>9h. Will this project be designed to meet the Washington Department of Ecology’s most current stormwater manual? [help]</p> <ul style="list-style-type: none"> If no, provide the name of the manual your project is designed to meet.
<p> <input type="checkbox"/> Yes <input type="checkbox"/> No </p>
<p>Name of manual:</p>
<p>9i. If you know what the property was used for in the past, describe below. [help]</p>
<p>9j. Has a cultural resource (archaeological) survey been performed on the project area? [help]</p> <ul style="list-style-type: none"> If yes, attach it to your JARPA package.
<p> <input type="checkbox"/> Yes <input type="checkbox"/> No </p>
<p>9k. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]</p>
<p>9l. Name each species or habitat on the Washington Department of Fish and Wildlife’s Priority Habitats and Species List that might be affected by the proposed work. [help]</p>

Part 10–Identify the Permits You Are Applying For

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.ecy.wa.gov/opas/>.
- Governor’s Office of Regulatory Assistance at (800) 917-0043 or help@ora.wa.gov.

<p>10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]</p> <ul style="list-style-type: none"> For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.
<p><input type="checkbox"/> A copy of the SEPA determination or letter of exemption is included with this application.</p>
<p><input type="checkbox"/> A SEPA determination is pending with _____ (lead agency). The expected decision date is _____</p>
<p><input type="checkbox"/> I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.)</p> <ul style="list-style-type: none"> Submit the Fish Habitat Enhancement Project form with this application. The form can be found at http://www.epermitting.wa.gov/Portals/JarpaResourceCenter/images/default/fishenhancement.doc

<p>X This project is exempt (choose type of exemption below).</p> <p>X Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt? _WAC 468-12-800: Categorical Exemptions.</p> <p><input type="checkbox"/> Other</p>
<p><input type="checkbox"/> SEPA is pre-empted by federal law. [help]</p>
<p>10b. Indicate the permits you are applying for. (Check all that apply.) [help]</p>
<p style="text-align: center;">LOCAL GOVERNMENT</p>
<p>Local Government Shoreline permits:</p> <p><input type="checkbox"/> Substantial Development <input type="checkbox"/> Conditional Use <input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Shoreline Exemption Type (explain):</p>
<p>Other city/county permits:</p> <p><input type="checkbox"/> Floodplain Development Permit <input type="checkbox"/> Critical Areas Ordinance</p>
<p style="text-align: center;">STATE GOVERNMENT</p>
<p>Washington Department of Fish and Wildlife:</p> <p><input checked="" type="checkbox"/> Hydraulic Project Approval (HPA) <input type="checkbox"/> Fish Habitat Enhancement Exemption</p>
<p>Washington Department of Ecology:</p> <p><input type="checkbox"/> Section 401 Water Quality Certification</p>
<p>Washington Department of Natural Resources:</p> <p><input type="checkbox"/> Aquatic Resources Use Authorization</p>
<p style="text-align: center;">FEDERAL GOVERNMENT</p>
<p>United States Department of the Army permits (U.S. Army Corps of Engineers):</p> <p><input type="checkbox"/> Section 404 (discharges into waters of the U.S.) <input type="checkbox"/> Section 10 (work in navigable waters)</p>
<p>United States Coast Guard permits:</p> <p><input type="checkbox"/> General Bridge Act Permit <input type="checkbox"/> Private Aids to Navigation (for non-bridge projects)</p>

Part 11—Authorizing Signatures

Signatures required before submitting the JARPA package.

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application _____ (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. EW (initial)

Eric Wolin
Applicant

2/4/2010
Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Eric Wolin
Authorized Agent Eric Wolin

2/4/2010
Date

11c. Property Owner Signature (if not applicant) [help]

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

N/A
Property Owner

N/A
Date

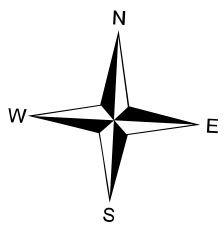
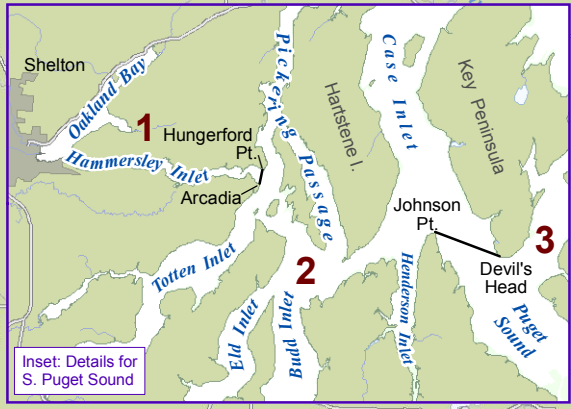
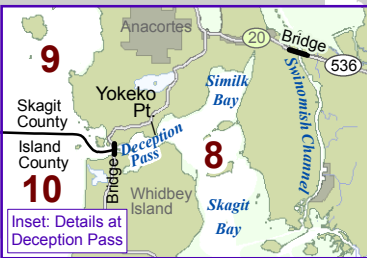
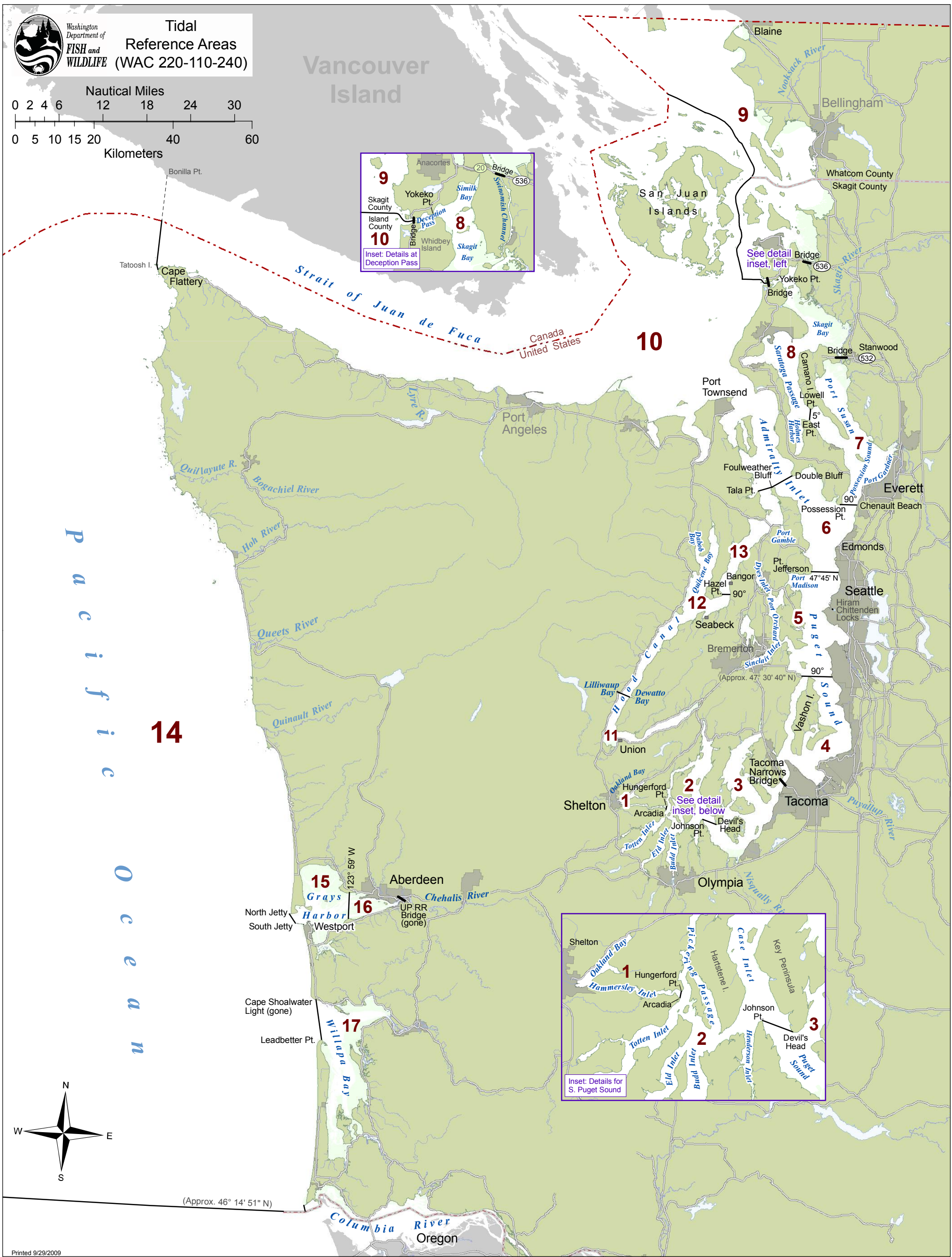
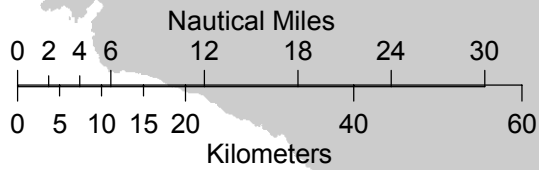
18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes 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.

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ORA publication number: ENV-019-09



Washington Department of FISH and WILDLIFE

Tidal Reference Areas (WAC 220-110-240)



(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.]

**Table 4-2
Chemical Baseline Conditions**

Terminal/ Water Body	Use Designations ¹	Water Quality – Contamination/Nutrients	Sediment Quality
Anacortes/ Guemes Channel	Aquatic Life Use ^a : Extraordinary Recreational Use ^b : Secondary Contact Shellfish Harvest ^c : Harvest Miscellaneous Uses ^d : All	2008 303(d) Category 4C – eelgrass impairment at ferry terminal due to inorganic nitrogen loading resulting in human-caused eutrophication ^{2,7}	Parameters of concern ² include: bis(2-ethylhexyl) phthalate, dibenzofuran, fluorene, fluoranthene, phenanthrene, and low molecular weight polynuclear aromatic hydrocarbon compounds (LPAH). 1995 sampling indicates that Bis (2-ethylhexyl) Phthalate is present at 1-4.6X the state Cleanup Screening Level (CSL). Dibenzofuran, fluorene, fluoranthene, and phenanthrene are present at 1X the CSL. All parameters of concern at present at 1-6.6X the state Sediment Quality Standard (SQS), with bis(2-ethylhexyl) phthalate at 6.6X SQS ⁸ .
Bainbridge Island/ Eagle Harbor	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and total PCBs in edible shellfish tissue for Eagle Harbor ^{2,7}	The Wyckoff/Eagle Harbor Superfund site lies in Eagle Harbor. A three-phase remediation of the East Harbor Operable Unit was completed in 2002, primarily targeting PAHs. Phase I consisted of a 54-acre sediment cap, and soil and groundwater remediation. Phase II extended the cap by 15 acres in 2001. Phase III continued groundwater remediation and included the installation of a sheet pile containment wall in the West Beach area of the Unit, immediately adjacent to the former Wyckoff facility to prevent oily seepage from reaching the harbor. 2002/2003 monitoring data indicates that PAH levels have decreased overall and the cap is effective, with the exception of two stations that have PAHs above the CSL ¹⁴ . 2005 follow-up sampling in the West Beach area indicates that PAHs are present in sediments that were not removed as part of a bulkhead remediation, and will need to be capped ¹⁵ . The Bainbridge Island Ferry Terminal is within the West Harbor Operable Unit of the Wyckoff/Eagle Harbor Superfund site. Low levels of LPAHs and high molecular weight PAHs (HPAHs) were found in surface sediments in the vicinity of the terminal in the late 1980s. Subtidal sediments around the ferry terminal met the SQS. Surface sediment PAHs above the EPA Record of Decision cleanup standard were addressed through source control and natural recovery tracked through long-term monitoring ⁹ . Monitoring results indicate that PAH concentrations have decreased three-fold from 1996, and that the PAHs are degrading as expected. 2005 sampling of surface sediments found only two stations above the SQS for PAHs. In addition, clam tissue monitoring indicates that PAHs are not accumulating in clam species in the terminal area. No further action is required for sediment remediation in the terminal area.
Bremerton/ Sinclair Inlet	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: dissolved oxygen for Sinclair Inlet ^{2,7}	For Sinclair Inlet, parameters of concern ² include: 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 2,4-dimethylphenol, 2-methylnaphthalene, 2-methylphenol, 4-methylphenol, acenaphthene, acenaphthylene, anthracene, arsenic, benzo(a)anthracene, benzo(h)pyrene, benzo(g,h,i)perylene, benzoic acid, benzyl alcohol, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, cadmium, chromium, chrysene, copper, dibenz(a,h)anthracene, dibenzofuran, diethyl phthalate, di-n-butyl phthalate, di-n-octyl phthalate, fluoranthene, fluorene, hexachlorobenzene, hexachlorobutadiene, HPAH, indeno(1,2,3cd)pyrene, lead, LPAH, mercury, naphthalene, N-nitrosodiphenylamine, pentachlorophenol, phenanthrene, phenol, pyrene, silver, total benzofluoranthenes, total PCBs, and zinc. The terminal is to the east of the Puget Sound Naval Shipyard (PSNS) Superfund site. PSNS sediment contaminants include PCBs and mercury. Sediments were dredged and placed in an underwater confined aquatic disposal pit. All work associated with the cleanup was completed in 2004. Average PCB concentrations before cleanup were 7.8 parts per million (ppm). Monitoring indicates that the post-cleanup PCB goal (4.1 ppm) was not met, and that surface sediment conditions are worse (11 ppm). Plans are now being developed to implement additional cleanup at this site. ¹⁰ Low chemical oxygen demand (COD) levels, the absence of sulfide smell, and the low concentrations of heavy metals were detected in sediments and suggest that the sediments in the area are in relatively good condition. Chromium, copper, lead, mercury, and zinc were detected at low concentrations. Cadmium was detected at one sample location. Low concentrations of PCBs were detected in two samples, below CSL criteria. PAHs were detected in the three sediment samples. ³
Clinton/ Possession Sound	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 4C – eelgrass impairment at ferry terminal due to inorganic nitrogen loading resulting in human-caused eutrophication ^{2,7} 2008 303(d) Category 5 – ammonia-N and fecal coliform ^{2,7}	Metals detected above detection limits were chromium, copper, lead, and zinc. Fluoranthene, chrysene, and phenanthrene were semivolatile analytes that exceeded sediment quality standards. These were marginal exceedances and do not exceed CSL criteria. ⁴
Edmonds/ South Possession Sound	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: fecal coliform at ferry terminal ^{2,7} 2008 303(d) Category 4C – eelgrass impairment at ferry terminal due to inorganic nitrogen loading resulting in human-caused eutrophication ^{2,7}	1989 and 1995 sediment testing to the south of the terminal indicates bis (2-ethylhexyl) phthalate and fluorene at 1 and 1.5 X CSL, respectively. Mercury, HPAH, and a number of organic chemicals are indicated at 1 to 5 X SQS ⁸ .

Water Quality Data for Ferry Terminals – 3rd Column

Terminal/ Water Body	Use Designations ¹	Water Quality – Contamination/Nutrients	Sediment Quality
Eagle Harbor/ Eagle Harbor	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and total PCBs in edible shellfish tissue for Eagle Harbor ^{2,7} The Eagle Harbor Maintenance Facility is within the West Harbor Operable Unit of the Wyckoff/Eagle Harbor Superfund Site. The Facility is the site of a former shipyard. Landfill materials and contaminated soil are present in the former shipyard disposal area in the NW portion of the property. Monitoring indicated that dissolved zinc and copper in groundwater exceeded marine water quality standards. In 1997, a shoreline geomembrane and tidal barrier were constructed to address the seepage. Exceedances were reduced by 90 percent. In 2006, the remedy was extended to the south to address continued exceedances. Monitoring will occur in 2007 to determine if the remedy is successful.	For Eagle Harbor, parameters of concern ² within the area exceeding standards include: arsenic, silver, lead, mercury, and zinc ⁸ . The Wyckoff/Eagle Harbor Superfund site lies in Eagle Harbor. A three phase remediation of the East Harbor Operable Unit was completed in 2002, primarily targeting PAHs. Phase I consisted of a 54- acre sediment cap, and soil and groundwater remediation. Phase II extended the cap by 15 acres in 2001. Phase III continued groundwater remediation and included the installation of a sheetpile containment wall in the West Beach area of the Unit, immediately adjacent to the former Wyckoff facility to prevent oily seepage from reaching the harbor. 2002/2003 monitoring data indicates that PAH levels have decreased overall and the cap is effective, with the exception of two stations that have PAHs above the CSL ¹⁴ . 2005 follow-up sampling in the West Beach area indicates that PAHs are present in sediments that were not removed as part of a bulkhead remediation, and will need to be capped ¹⁵ . The Eagle Harbor Maintenance Facility is within the West Harbor Operable Unit of the Wyckoff/Eagle Harbor Superfund site. Pre-remediation sediment mercury concentrations exceeded state standards. Remediation consisted of dredging and placement in a confined disposal facility, placement of a 3-foot-thick cap, and placement of a 1-foot-thin cap. No remedial action was taken in areas where sediment concentrations were below CSL. 2005 sediment testing indicates no mercury exceedances in the thick cap area, and two CSL exceedances in the thin cap area. However, 1994 bioassay tests results indicate that these exceedances would likely pass confirmatory bioassay tests. No further monitoring is recommended.
Fauntleroy/ Puget Sound	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: fecal coliform in Fauntleroy Cove ^{2,7}	1997 sediment testing in Fauntleroy Cove showed exceedances of SQS for butylbenzylphthalate and phenanthrene. ⁸
Friday Harbor/ San Juan Channel	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: dissolved oxygen ^{2,7}	1991 sediment testing in Friday Harbor showed exceedances of SQS for fluoroanthene, fluorene, and phenanthrene. ⁸
Keystone/ Admiralty Bay	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	No parameters of concern identified ^{2,7}	The Corps conducts maintenance dredging and sediments are clean.
Kingston/ Appletree Cove	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 4C – eelgrass impairment at ferry terminal due to inorganic nitrogen loading resulting in human-caused eutrophication ^{2,7}	Sediment testing in 1999 at the ferry terminal indicated that sediments did not exceed Puget Sound Dredged Disposal Analysis (PSDDA) screening levels, SQS, and CSL. ⁵
Lopez/ Upright Channel	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	No parameters of concern identified ^{2,7}	Sediment quality has not been tested near the terminal. There are no known sources of contamination and sediment quality is expected to be good.
Mukilteo/ Possession Sound	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	No parameters of concern identified ^{2,7}	For North Possession Sound, parameters of concern ² within the area include: arsenic, naphthalene, bis(2-ethylhexyl) phthalate, phenol, 2-Methylphenol, 4-Methylphenol, 2,4-Dimethylphenol, benzyl alcohol, benzoic acid, and pentachlorophenol.
Orcas/ West Sound	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	No parameters of concern identified ^{2,7}	No information is available.
Point Defiance/ Dalco Passage	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: total PCBs in rockfish tissue in Dalco and Colvos Passages ^{2,7}	For Commencement Bay and Dalco and Colvos Passages, parameters of concern ² within the area include: arsenic, cadmium, chromium, copper, lead, mercury, silver, zinc, bis(2-ethylhexyl) phthalate, PCBs, phenol, 2-Methylphenol, 2,4-Dimethylphenol, pentachlorophenol, and 4-Methylphenol. The ferry terminal is located within the Asarco Tacoma Sediments Superfund site (Operable Unit 6). Heavy metals arsenic, cadmium, copper, lead, and zinc are the primary contaminants of concern at the site. A remedial investigation (RI) was conducted at the site to delineate the contaminant effects area. 1987 sampling indicates that the station nearest the terminal shows arsenic exceeding the CSL by 9 times, zinc by 4X, lead and copper by 1X. However, based on bioassay results, the station is in the Moderately Impacted Area, and will not require active remediation unless long-term monitoring determines it is necessary ¹³ . Remediation is pending in the Yacht Basin (SE of the terminal), and the Northshore Area (NW of the terminal), though no date has been set due to Asarco bankruptcy and lack of federal funding to implement the cleanup. ⁶
Port Townsend/ Port Townsend Bay	Aquatic Life Use: Excellent Recreational Use: Secondary Contact Shellfish Harvest: None Miscellaneous Uses: All	2008 303(d) Category 4C – eelgrass impairment at ferry terminal due to inorganic nitrogen loading resulting in human-caused eutrophication ^{2,7}	1987 sediment testing showed SQS exceedances of de benzo(a,h)anthracene and fluoroanthene. ⁸

Water Quality Data for Ferry Terminals – 3rd Column

Terminal/ Water Body	Use Designations¹	Water Quality – Contamination/Nutrients	Sediment Quality
Seattle/ Elliott Bay	Aquatic Life Use: Excellent Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: fecal coliform in Elliott Bay ^{2,7}	For Puget Sound, parameters of concern ² within the area include: mercury, silver, 2-Methylnaphthalene, acenaphthene, fluorene, phenanthrene, LPAH, benz(a)anthracene, butyl benzyl phthalate, bis(2-ethylhexyl)phthalate, debenzofuran, PCBs, naphthalene, 1,2-Dichlorobenzene, hexachlorobenzene, hexachlorobutadiene, N-Nitrosodiphenylamine, 2,4-Dimethylphenol, pentachlorophenol, 1,2,4-Trichlorobenzene, 2-Methylphenol, benzyl alcohol, and benzoic acid Ecology's SEDQUAL Release 5 (2004) shows multiple test events at Colman Dock from 1988 to 2002. ⁸ Testing under the dock shows SQS exceedances of acenaphthene, and SQS/CSL exceedances of mercury. Testing within and near the northern slips (currently used for the Bainbridge Island route) shows SQS exceedances of cadmium, total PCBs, acenaphthene, benzo(g,h,i)perylene, di-n-butylphthalate, fluoroanthene, and indeno(1,2,3-cd)pyrene; and SQS/CSL exceedances of mercury, pentachlorophenol, silver, dibenzofuran, chrysene, and fluorene. Testing within and near the southern slip (currently used for the Bremerton route) shows SQS exceedances of benzo(a)pyrene, benzo(g,h,i)perylene, benzofluoroanthenes, chrysene, fluoroanthene, and indeno(1,2,3)pyrene; and SQS/CSL exceedances of acenaphthene, benzo(a)anthracene, fluorene, and phenanthracene. Testing with and near the slip currently used for the Bremerton passenger-only route shows SQS exceedances of benzo(g,h,i)perylene; and SQS/CSL exceedances of 2-methylnaphthalene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzofluoroanthenes, chrysene, dibenzo(a,h)anthracene, fluoroanthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene. In 1989, a cap was placed on contaminated sediments under the new south vehicle holding trestle. 2004 monitoring indicates that only Station 6 (of seven) showed any exceedances of the SQS for zinc; the CSL for lead, mercury and silver; and the Dredged Material Management Program screening level values for flouranthene, pyrene, and total HPAHs. Station 6 contamination may have been deposited on the cap from a nearby Combined Sewer Outfall (CSO), or come from below the cap ¹¹ . Pier 48 (to the south of the terminal) was sampled in 2005 for mitigation planning. Of seven stations, the CSL was exceeded at six for mercury, at two for silver, and at one for organics. The SQS was exceeded at two stations for PAH and a variety of organics, at one for two organics, and at three for PCBs. Bioassay tests of the six stations with exceedances resulted in failures for three stations with mercury, silver, and PAH exceedances. These three stations are closest to a CSO and storm drain discharge. ¹²
Shaw/ Harney Channel	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	No parameters of concern identified ^{2,7}	No known dangerous waste generators, cleanup sites, or leaking underground storage tanks within a 1 mile radius. Only solid rock is generally exposed, even at extreme minus tide. Sediment sampling could not occur because only rock was exposed and very little sediment was available to sample. Sediment quality is expected to be good.
Southworth/ Colvos Passage	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 4C – eelgrass impairment at ferry terminal due to inorganic nitrogen loading resulting in human-caused eutrophication ^{2,7} 2008 303(d) Category 5 – parameters of concern include: dissolved oxygen in the East Passage ^{2,7}	1998 sampling in the general vicinity indicated that benzoic acid was present at one station at 3X the CSL. ⁸
Tahlequah/ Dalco Passage	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 5 – parameters of concern include: total PCBs in rockfish tissue in Dalco Passage ^{2,7}	No information is available.
Vashon/ Colvos Passage	Aquatic Life Use: Extraordinary Recreational Use: Primary Contact Shellfish Harvest: Harvest Miscellaneous Uses: All	2008 303(d) Category 4C – parameters of concern include: continuous cover of ulvoid macroalgae that impairs aquatic life , from identified human causes at the north end of Vashon Island ^{2,7}	No information is available.

Notes:

- a Aquatic Life Use categories: Extraordinary, Excellent, Good, Fair (WAC 173-201A)
- b Recreational Use categories: Primary Contact, Secondary Contact
- c Shellfish Harvest: None or Harvest
- d Miscellaneous Use categories: Wildlife Habitat, Harvesting, Commercial/navigation, Boating, Aesthetics
- 1 Water Quality as defined by WAC 173-201.A-610, Table 612: Use Designations for Marine Waters.
- 2 Contaminants and nutrient exceedances are based on Ecology's 303(d) list, which lists impaired waterbodies, and does not always mean these parameters occur at the ferry terminal.
- 3 Hart Crowser 1996. Focused technical memorandum results of sediment sampling and analysis. Bremerton ferry terminal, Bremerton Washington. Prepared for the Washington State Department of Transportation.
- 4 Hart Crowser 1995. Results of Sampling and Analysis Preliminary Sediment Quality Assessment. Clinton Ferry Terminal, Clinton, WA.
- 5 Pacific International Engineering. 1998. PSDDA Sediment Characterization Repot, Kingston Passenger Only Ferry Terminal. Prepared for Washington State Ferries.
- 6 U.S. Environmental Protection Agency. Kevin Rochlin. Personal communication. November 2006.
- 7 Washington State Department of Ecology. 2008. 303(d) list Interactive Mapping Tool. <http://apps.ecy.wa.gov/wqawa/viewer.htm>
- 8 Washington State Department of Ecology. 2008. SEDQUAL Database queries.
- 9 U.S. Environmental Protection Agency Superfund Record of Decision Amendment. West Harbor Operable Unit. Wyckoff/Eagle Harbor Superfund Site. 2005.
- 10 Washington State Department of Ecology. Benson, Ted. Personal communication. November 2006.
- 11 CH2M HILL. 2004 South Cap Monitoring Report. Seattle Ferry Terminal. 2004.
- 12 Anchor Environmental, L.L.C. Sampling and analysis Report. Washington State Ferries Pier 48 Redevelopment. 2005.
- 13 U.S. Environmental Protection Agency. Commencement Bay Nearshore/Asarco Sediment/Groundwater Operable Unit 06. Ruston and Tacoma, Washington. Record of Decision. July 2000.
- 14 Integral Consulting, U.S. Army Corps of Engineers. 2002-2003 Year 8 Environmental Monitoring Report. Wyckoff/Eagle Harbor Superfund Site. East Harbor Operable Unit. August 2004.
- 15 U.S. Environmental Protection Agency. Maryjane Nearman. Personal communication. November 2006.

SPCC Plans are applied to the life of a construction project and may need to be amended over time with changing conditions. Periodic inspections will ensure that the required preparation and preventative steps identified in the SPCC Plan have been taken to keep the site in compliance throughout the life of the project.

The *Standard Specifications* provide the complete list of required contents for the Contractors SPCC Plan in Section 1-07.15(1).

1-2.2K Responsibility for Environmental Compliance During Construction

The following procedure pertains to WSDOT personnel on all WSDOT contracts and contains duties and activities by persons other than the project staff, but all of which are related to construction contracts and affect the Project Engineer to one degree or another. The Project Engineer must stay aware of this procedure and follow it as written.

1-2.2K(1) Environmental Compliance Assurance Procedure

The purpose of the Environmental Compliance Assurance procedure is to recognize and eliminate environmental non-compliance events during the construction phase on Washington State Department of Transportation (WSDOT) construction sites, and to ensure prompt notification to WSDOT management and agencies. For purposes of this procedure, non-compliance events are defined as actions that are not in compliance with environmental standards, permits, or laws.

When any action (Notification Trigger) below occurs or if there are questions about compliance, the Project Engineer (PE) shall initiate this procedure to develop corrective actions to solve the identified problem. The Regional Environmental Manager (REM) will serve as a resource to the PE and give priority to addressing the actions, activities, or situations that stem from notification triggers. The PE and REM will work together on an appropriate response to the notification trigger to avoid or minimize environmental damage.

A. Notification Triggers: “Notification Triggers” (listed below) means an action, activity, or situation that requires the Project Engineer to implement the Environmental Compliance Assurance Procedure.

1. Notice from a resource agency that a violation has occurred;
2. Any action that, in the judgment of the REM, contractor or Project Engineer, may violate environmental permit conditions, agreements, or approvals for the project; or other environmental laws, ordinances, or regulations;
3. Any unauthorized work, activity, or fill in wetlands, shorelines, creek beds (including dry channels), other waters of the state, or critical habitat;
4. Any emergency protection activity that involves unauthorized placement of fill in wetlands, shorelines, creek beds (including dry channels) or waters of the state or for bank stabilization activities where fill or structures are placed on the bank;

5. Any action or project revision requested by an agency after a site inspection that may be in conflict with other permits;
6. Any spill, or release of hazardous materials, petroleum products, or chemicals to:
 - water or areas that have the potential to enter waters of the state (i.e. stormwater conveyances, ditches, swales, ground water).
 - land, when the spill or release is an immediate threat to human health or the environment (i.e. dangerously toxic, explosive or flammable situations that result in severe or substantial consequences, etc.).¹
7. Any evidence of a release from a buried underground storage tank.
8. Any situation that results in a fish kill, or if dead or dying fish are discovered in the vicinity of the project;
9. Activities that monitoring shows are out of compliance.

B. Notification and Resolution Process: In the event of a notification trigger, the following steps shall be taken:

1. If a notification trigger is observed first by the contractor or REM, the contractor or REM shall immediately notify the Project Engineer.
2. The Project Engineer must:
 - Step 1. Immediately notify the Contractor of the situation, implement emergency response procedures including agency notification, and suspend all non-conforming work on the site.
 - Step 2. Immediately notify the Regional Environmental Manager (REM). Consultation with the REM must occur before any remediation actions are taken.
 - Step 3. In consultation with REM assemble the following information
 - a. The activities that triggered the notification and why they occurred.
 - b. Location of the work.
 - c. Potential solutions to the problem, or if additional investigation is needed, the agreed upon course of action.
 - d. Any related site constraints or safety issues.
 - e. Urgency of the issue
 - Step 4. Notify his or her immediate supervisor.
 - Step 5. *Notify the Regional Administrator.
 - Step 6. In consultation with the REM, determine the resource agencies having jurisdiction and who will notify them.

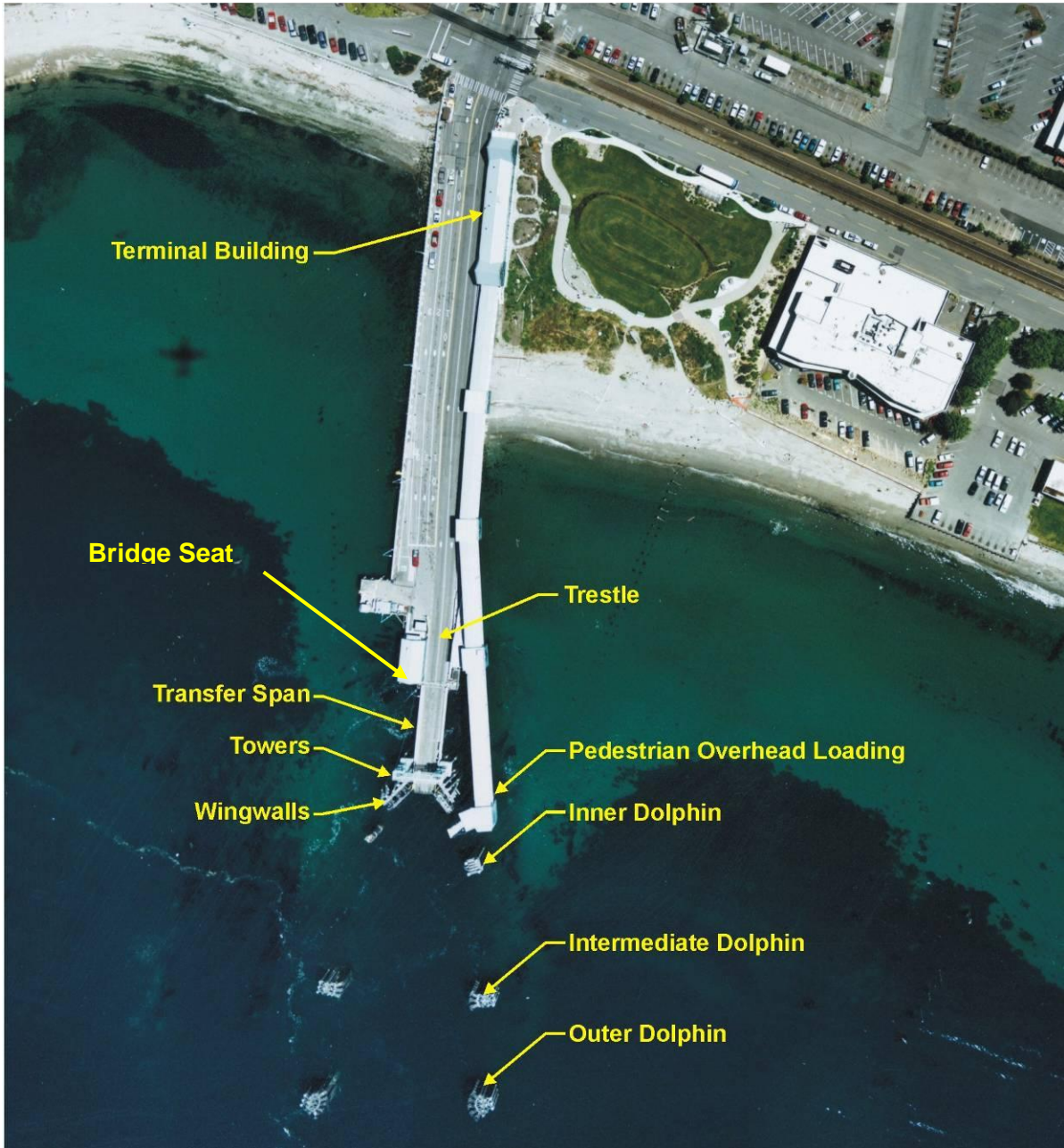
¹ Note: All spills need to be contained and disposed of and reported properly. Follow the procedures outlined in the project specific Spill Prevention, Control and Countermeasures Plan (SPCC).

- Step 7. Document all actions, conversations and activities.
3. The Regional Environmental Manager must immediately:
- Step 1 *Notify the Director of Environmental Services.
- Step 2. Notify his or her immediate supervisor.
- Step 3. Work with the Project Engineer to resolve the issue that caused the notification trigger.
- Step 4. Identify and obtain appropriate permits or permit revisions with the aid of the Project Engineer.
- Step 5. Document all actions, conversations, and activities. Communicate issues and send appropriate documentation to Regulatory and/or Resource Agencies.
4. *The Director of Environmental Services must immediately:
- Step 1. Notify Compliance Branch Manager and any other ESO Program Managers associated with the resource issue.
- Step 2. Notify Director of Environmental & Engineering Programs.
- Step 3. Notify the Regional Environmental Manager that the Director of Environmental & Engineering Programs has been contacted. Regional Environmental Manager must then notify the Project Engineer that the reporting procedure has been completed.
5. *The Regional Administrator will:
- Step 1. Coordinate with the Director of Environmental & Engineering Programs to contact the Assistant Secretary of Engineering and Regional Operations advising him or her of the situation, and provide updates as needed on the situation.
- Step 2. Ensure that the Project Engineer and the Regional Environmental Manager have the necessary resources, authority and organizational support to successfully resolve the Non-complying activity.
- C. **Timing:** Due to costs of project delays, or risk of not acting quickly during emergency situations, the REM shall provide a 24 hour contact person for environmental consultation.
- D. Documentation:
1. The Project Engineer shall document the details of the notification and non-complying activity resolution in the contract records.
 2. The Regional Environmental Manager shall maintain a record of all regional non-compliance events. REMs shall collect and maintain, at a minimum, the following data on all non-compliance events:
 - a. Project name and Location
 - b. PE and Prime Contractor
 - c. Incident Date
 - d. Incident Description
 - e. Permit/Regulation Violated
 - f. Resource Agency(s) notified and date of notification
 - g. Whether or not resource agency staff conducted site review in response to notification
 - h. Record of Notice Of Violation and/or penalties issued
- The REM shall provide all regional non-compliance tracking data to ESO Compliance Branch Manager for the purposes of annual reporting and review of compliance performance.
3. The Project Engineer and the Regional Environmental Manager shall coordinate and prepare the appropriate response to the regulatory and/or resource agency. The response shall include documentation about the non-compliance event and how it was resolved, including any preliminary mitigation solutions.
- E. Roles and Responsibilities:
1. "Project Engineer" is the person responsible for the project and administration of the construction contract. This responsibility may be delegated to a subordinate employee on site, but the ultimate responsibility for making sure these procedures are followed will be with the Project Engineer. The Project Engineer shall have a thorough knowledge of all of the environmental permit conditions and design requirements for the project, and have such certifications and other qualifications as may be required.
 2. "Regional Environmental Manager" is the person responsible for administering the regional environmental program. This responsibility may be delegated to a subordinate employee with knowledge of environmental permitting and procedures, but the ultimate responsibility for setting and interpreting regional environmental policy will be with the Regional Environmental Manager.
 3. "Contractor" is as defined in Section 1-01.3 of the *Standard Specifications* for Road, Bridge, and Municipal Construction.
- *Denotes that the action is mandatory when the non-compliance event 1) results in agency enforcement staff coming on site to conduct enforcement review; and/or 2) there is a high likelihood the event will result in a Notice Of Violation or a monetary penalty.*

FERRY TERMINALS AND THEIR LOCATIONS

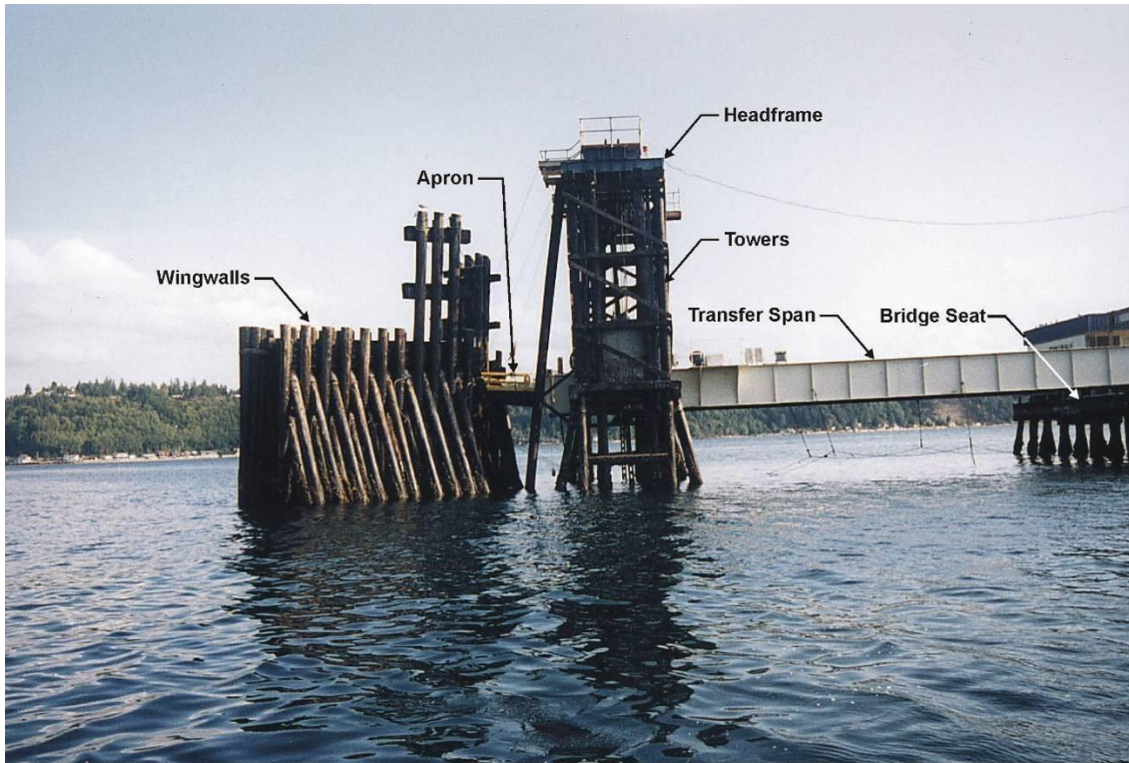
Terminal	County	Latitude	Longitude	Section	Township	Range	WRIA
Anacortes	Skagit	48.50706	-122.67748	22	35N	1E	3
Bainbridge Island	Kitsap	47.6225	-122.51028	26	25N	2E	15
Bremerton	Kitsap	47.512001	-122.497000	24	24N	1E	15
Clinton	Island	47.97536	-122.34966	30	29N	4E	6
Eagle Harbor	Kitsap	47.622222	-122.51000	26	25N	2E	15
Edmonds	Snohomish	47.813056	-122.384444	23	27N	3E	8
Fauntleroy	King	47.52318	-122.39595	35	24N	3E	9
Friday Harbor	San Juan	48.53563	-123.01396	13	35N	3W	2
Keystone	Island	48.15907	-122.67264	22	31N	1E	6
Kingston	Kitsap	47.794998	-122.495000	25	27N	2E	15
Lopez Island	San Juan	48.570487	-122.883589	36	36N	2W	2
Mukilteo	Snohomish	47.94945	-122.3048	4	28N	4E	7
Orcas	San Juan	48.59733	-122.94354	22	36N	2W	2
Point Defiance	Pierce	47.306	-122.514	14	21N	2E	12
Port Townsend	Jefferson	48.111	-122.759	11	30N	1W	17
Seattle (Colman Dock)	King	47.6025	-122.338056	6	24N	4E	8
Shaw	San Juan	48.584	-122.929	27	36N	2W	2
Southworth	Kitsap	47.512778	-122.495	1	23N	2E	15
Tahlequah	King	47.33202	-122.5077	2	21N	2E	15
Vashon	King	47.51038	-122.46376	6	23N	3E	15

Ferry Terminal Structures

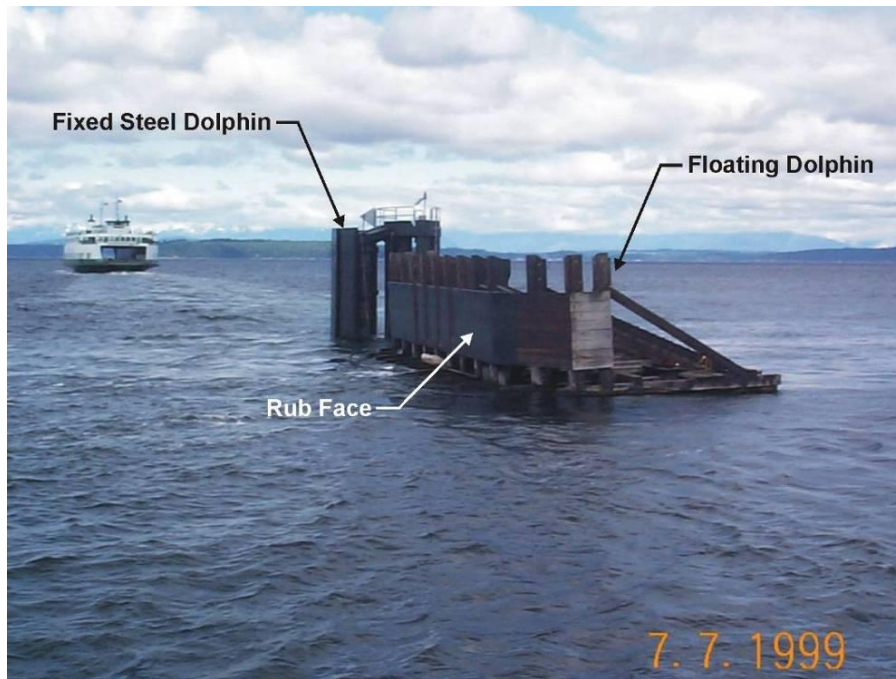


Typical Ferry Terminal, Aerial View

Ferry Terminal Structures



Typical Timber Ferry Terminal



Floating Dolphin and Fixed Steel Pile Dolphin