WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Coal Creek Slough Restoration Project

2. Name of applicant:

Lower Columbia River Estuary Partnership

3. Address and phone number of applicant and contact person:

Applicant:
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Lower Columbia River Estuary Partnership
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Portland, OR 97204
(503) 226-1565 ext.227

Contact Person:
Sarah Wallace
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4. Date checklist prepared:
February 22, 2008

5. Agency requesting checklist:
Upon preliminary inquiry it appears the Washington Department of Natural Resources is the lead agency.

6. Proposed timing or schedule (including phasing, if applicable):
The proposed restoration project is scheduled to be implemented in September 2008.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
Within the scope of this project there are no future plans for additions, expansions, or additional removal of piles structures or vessels. However, monitoring is proposed to take place after the removal has been completed to assess restoration success. The monitoring would include hydrologic and ecologic assessment.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
Coal Creek Slough is a low-flow side channel of the lower Columbia River. It is designated as fresh waters under WAC 173-201 A-602, which is found in the Washington Department of Ecology Water Quality Standards for Surface Waters of the State of Washington Chapter 173-201A WAC. This report states that Coal Creek Slough is 'core summer habitat' for aquatic life and that wildlife habitat, harvesting, commercial navigation, boating, and aesthetics are miscellaneous uses for this slough. The turbidity for this area is not to exceed 5 nephelometric turbidity units (NTU) over background when the background is 50 NTU or less; or a 10% increase in turbidity when the background turbidity is more then 50 NTU.

Past developments in Longview, Washington have had an affect on the slough and caused it to be highly manipulated. The slough has been diked, drained and riprapped to accommodate past agricultural practices and Washington State Route 4, which parallels portions of the slough's north shore. A rock quarry and garbage dump located to the east and north east of the slough may also impact water quality and the overall environmental conditions of the slough.

Contaminant status of the derelict vessel is currently unknown. A dive operation will be completed to assess the overall integrity of the vessel and the status of any potential contaminants. The pile structures are currently being tested for the presence of creosote by the U.S Geological Survey. From field visits the pilings did not appear to be treated, but the results of the USGS testing will provide a definitive answer. Additionally, monitoring will occur at the pile structure site prior to removal to further assess its hydrologic and ecologic parameters. Monitoring at the site is also proposed during the extraction and post-removal to evaluate project success.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

To our knowledge, there are no other applications pending for governmental approvals directly affecting the property covered by this proposal.

10. List any government approvals or permits that will be needed for your proposal, if known.
- Washington Department of Fish and Wildlife for Hydraulic Project Approval
- Washington Department of Ecology for 401 Water Quality Certification
- Washington Department of Natural Resources for Aquatic Resources Use Authorization Notification
- U.S. Army Corps of Engineers for Section 404 permit and Section 10 permit (for derelict vessel removal only)
- State Historic Preservation Office for Section 106 Historical Preservation Determination

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Coal Creek Slough is a side-channel of the lower Columbia River and is located approximately 7 miles west of Longview, Washington. The Lower Columbia River Estuary Partnership is proposing a restoration project there to enhance the ecological

and aesthetic quality of the slough through the removal of a derelict vessel and a pile structure field. The vessel is 42 feet in length and located near the mouth of Coal Creek Slough. A photo of the vessel can be seen on Supplemental Sheet 2. The pile structure field is comprised of approximately 30 timber pile structures located roughly 2 miles east of the mouth of the slough. A photo of the pile structures is displayed on Supplemental Sheet 1 and a map showing the location of both restoration sites is on Supplemental Sheet 3. The proposed restoration project will occur during the approved June through September in-water work window, and likely taking place during the later part of that window. We anticipate the duration of the in-water work to be less then 5 days and no site preparation work is anticipated.

Site 1: Pile Structure Field
The first site where in-water work will occur involves the removal of approximately 30 timber pile structures from an area that is roughly 640 square feet. A discrete pile field of exactly 26 pile structures falls within the 640 square foot area. A handful of additional pile structures are located between 20 to 50 feet from this discrete pile structure field. If funding allows, these additional 4-8 pile structures will also be removed. Most pile structures are approximately 12 inches in diameter, but some range up to 16 inches. Width and depth of Coal Creek Slough at the project site are 100 feet by 20 to 25 feet.

The pile structures will be removed following the Best Management Practices (BMP) attached to this checklist as Supplemental Sheet 4. The preferred method for extraction is vibratory extraction, which is a common method for removing both steel and timber piles. A vibratory hammer, a large mechanical device mostly constructed of steel (weighing 5-16 tons) and suspended from a crane by a cable is positioned onto a pile. The hammer is engaged and the crane slowly lifts the hammer, unseating the pile from the sediment. Once the pile is unseated, the crane will continue to raise the hammer and slowly pull the pile from the sediment. When the bottom of the pile reaches the mudline, the vibratory hammer will be disengaged. A choker cable connected to the crane will be attached to the pile, and the pile will be lifted from the water and placed on the barge. (See Supplemental Sheet 5 for photo of vibratory extractor, crane, and barge used for a pile removal project near Port Angeles, Washington). This process will be repeated for each pile structure. Extracted pile structures will be placed on the barge in a containment basin constructed of durable plastic sheeting with side walls supported by hay bales or another support structure. They will then be transported to an appropriate disposal facility.

In some cases, removal with the vibratory hammer may not be possible because the pile will break apart due to the vibration, or piles may already be damaged due to age or abuse. Timber piles are particularly prone to breaking at the mudline because of damage caused from marine borers and vessel impacts. Broken or damaged pile structures can be removed using the direct pull method of wrapping the individual pile with a choker cable and pulling it directly from the sediment with the crane. If the pile breaks between the waterline and the mudline, it could be removed with a clamshell bucket. Finally, if the pile breaks at or near the existing substrate and it can not be removed in its entirety then the pile structure will be cut using a pneumatic underwater chainsaw.

Site 2: Derelict Vessel
The derelict vessel is 42 by 12 feet and is located near the mouth of Coal Creek Slough where the width is approximately 200 feet. Water depth at the vessel is 2 to 5 feet but drops off steeply in the surrounding area. A crane attached to a barge will lift the vessel out of the water and place it onto the barge. The same crane and barge used for the piling removal will be used here for the vessel removal.

Site Access and Clean Up and Access
The proposed project can be accessed from the lower Columbia River mainstem. We anticipate easy barge access up Coal Creek Slough to both the derelict vessel and the pile structure field. Site clean-up will involve the disposal of the pile structures, derelict vessel, the floating surface boom used to capture any floating surface debris during pile removal, and any other debris associated with the removal of the structures. These materials will be transported from the site to the appropriate disposal facility. No materials will remain on the site after extraction is complete.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The proposed restoration project will occur in Coal Creek Slough, which is located approximately 7 miles west of Longview, Washington. A map of the project location is in Supplemental Sheet 3. The project falls within the following Township Range and Sections:
T8N R4W Sec. 12
T8N R3W Sec. 07
T8N R3W Sec. 08
T8N R3W Sec. 17

The latitude and longitude for the project is:
46°11'0"N
123°5'0"W through 123°7'0"W

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other . . . . . .

All work will occur in-water and the surrounding area is generally flat.

b. What is the steepest slope on the site (approximate percent slope)?

The stream bank where the vessel will be extracted is very gradual and less then 1% slope. See Supplemental Sheet 2 for photo of vessel and surrounding area.

The stream bank at the pile structure site is approximately 5-10% slope for the first 5 feet immediate along the slough channel and then is 0% slope where Washington State Route 4 (Ocean Beach Highway) is located. See Supplemental Sheet 1 for pile structure field photo and surrounding area.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

All work for the proposed restoration project will be completed in-water. The streambed sediment at the vessel site appears to be sand, and the pile structure site seems to be comprised of sand and muck. According to the Soils Survey Geographic database (SSURGO), the adjacent land at the pile structure site is made up of Hazeldell gravely loam and Caples silty clay loam. The surrounding soil type for the land adjacent to the derelict vessel site is Hazeldell gravelly loam.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

To our best knowledge there are no surface indications or history of unstable soils in the proposed projects immediate vicinity.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

This question is not applicable to the proposed project

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

There is no potential for erosion to occur outside the Coal Creek Slough channel. There is potential for the removal of the pile structure field to increase erosion of the streambed. The anthropogenic effect of the non-native pile structures could be causing the blockage of the slough's side channel. The removal of these structures could bring the sediment flow dynamics back into its natural equilibrium. The removal of the derelict vessel also has the potential to affect the flow dynamics of the channel, but due to the shallow nature of the water at the vessel's location it is unlikely to have a significant effect.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

This question is not applicable to the proposed project

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

All proposed work will occur in-water, and the barge will not be grounded.

Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

The emissions that would occur as a result of the proposed restoration project are from the mobilization of the barge to the site and during extraction; and the automobiles used to transport the piles, vessel, and associated debris to the appropriate disposal facility. After the completion of the project no emissions will result.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no known off-site sources of emissions or odors resulting from this proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The contractor selection process will involved screening applicants through a number of selection criteria. One selection criteria is the contractor's proximity to Coal Creek Slough and the distance the barge must travel for mobilization. The

contractors traveling the shortest distance to the restoration site will be given higher priority in the selection process. Another measure for controlling air emissions is to select the closest appropriate disposal facility to the restoration site for the disposal of the vessel, pile structures, and associated debris. Decreasing the distance the barge, automobiles, and other machinery must travel will reduce the emissions emitted to the air during the implementation of the restoration project.

3. **Water**

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The proposed project will be occurring in Coal Creek Slough, which is a side channel of the lower Columbia River estuary.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The proposed project will occur in Coal Creek Slough. The derelict vessel is located near the mouth of the slough and the pile structure field is approximately 2 miles east of the vessel. Supplemental Sheet 3 shows their location.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

This question is not applicable to the proposed project.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

The proposed project does not require this.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

All work will occur in-water and will not be in the floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The proposed project does not require discharges.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

This question is not applicable to the proposed project.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

This question is not applicable to the proposed project.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

This question is not applicable to the proposed project.

2) Could waste materials enter ground or surface waters? If so, generally describe.

This question is not applicable to the proposed project.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

This question is not applicable to the proposed project.

4. Plants

a. Check or circle types of vegetation found on the site:

✓ deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

✓ shrubs

✓ grass

pasture

crop or grain

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

No plants are found on the site, the site is in within the Coal Creek Slough channel. The surrounding vegetation is primarily deciduous trees and shrubs.

b. What kind and amount of vegetation will be removed or altered?

No vegetation will be removed or altered as a result of the proposed restoration project. All work will be in-water and the barge and machinery will not be grounded or affect vegetation.

c. List threatened or endangered species known to be on or near the site.

According to information provided by the Washington Department of Natural Resource's Natural Heritage Program, there are no known threatened or endangered plant species on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The scope of this proposed project is not to enhance the native vegetation on the site. This question is not applicable to the proposed project.

5. **Animals**

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

According to Washington Fish and Wildlife the following species have the potential to be present during the implementation at the proposed restoration project:
Steelhead, chinook, coho, chum, and smelt.

c. Is the site part of a migration route? If so, explain.
Coal Creek Slough is a migration route for a number of salmonid species as they migrate to and from the ocean through off-channel habitat. Also, the Pacific Flyway, an avian migration route for a diversity of birds, runs through this area.

d. Proposed measures to preserve or enhance wildlife, if any:
The proposed restoration project seeks to enhance the ecological features of the surrounding ecosystem by removing two anthropogenic physical stressors. The removal of the pile structure field, and to a lesser extent the derelict vessel, may improve juvenile salmonid habitat by improving sediment flow and water quality of the slough, reducing habitat for species such as Northern Pikeminnow and Cormorants that prey on juvenile salmon, and potentially removing contaminant sources. The pile structures may have been treated with creosote and prior to removal the pilings will be tested for creosote presence. Also, prior to extraction, a dive operation will assess the derelict vessel for potential contaminants. If contaminants are found onboard the vessel, the area surrounding the vessel will be boomed to contain potential spills.

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
The proposed project will require the use of diesel fuel for barge operation and gasoline fuel for other associated automobiles. For in-water work, the vibratory hammer will be operated using vegetable fuel.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
The proposed project will not affect the use of solar energy by adjacent neighbors.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
The duration of the project is not expected to exceed 5 days. Barge mobilization will be from the closest location possible, and the selection of the project contractor will take into account the distance the barge must travel for site mobilization. Contractors traveling the shortest distance to the restoration site will be given higher priority in the selection process. This will help ensure the least amount of diesel fuel is necessary for the mobilization of the equipment.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.
Contaminant levels for the sediment surrounding the pile structures are unknown. The United States Geological Survey (USGS) will perform baseline monitoring on these sediments prior to the project's inception. If USGS finds

contaminated sediment these contaminants could be released into the water during pile structure extraction. This could result in a short-term increase of contaminant levels in Coal Creek Slough. The surrounding sediment will likely only be contaminated if the pile structures were treated with creosote. The testing for creosote presence is also being completed by the USGS. If the pile structures are creosote treated, their extraction will remove a contaminant source from the water.

During the implementation of this project there is also the short-term risk of the barge leaking petroleum products during mobilization and extraction. Every measure will be taken to ensure the highest quality professionals are selected to implement this restoration project and lessen the likelihood that such an event will take place. Another potential risk would be if fuel or any other contaminant on board the derelict vessel was to leak. This information is not known at this time. A dive operation will be completed to assess the overall integrity of the vessel and the status of any potential contaminants

1) Describe special emergency services that might be required.
The special emergency services to assist in controlling a fuel leak would be needed in the remote case of the extraction machinery leaking.

2) Proposed measures to reduce or control environmental health hazards, if any:
Vegetable fuel will be required to operate the vibratory hammer while performing in-water work. This fuel source is more environmentally friendly then diesel fuel.

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
The Washington State Route 4 runs along portions of Coal Creek Slough.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The removal of the derelict vessel and the use of the vibratory hammer for the removal of the pile structures will generate sound that exceeds the normal ambient noise of the surrounding environment. The noise generated from the project will be short-term and after project completion no noise will be generated by the finished project. The extraction equipment generating noise will only be operational during daylight hours.

3) Proposed measures to reduce or control noise impacts, if any:
The noise impacts will not last for a long duration because of the small number of pile structures being extracted. On average, the vibratory hammer will be engaged for 15-30 minutes (or less) per pile, depending on sediment conditions and length of piles. Also, the extraction equipment generating noise will only be operational during daylight hours to control the effects of noise on the surrounding area.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties?
Coal Creek Slough is a side channel of the lower Columbia River and possible uses for the channel are fishing and boating. According to the Cowlitz County Planning Department, the surrounding property to the north of the slough is designated 'Forest Open Space' with five acre minimum parcels. The property to the south of the slough is designated 'Agricultural Land'. The actual uses of the surrounding properties could differ from what is designated by the Planning Department. Two land uses in the surrounding area, which could be affecting water quality, are a rock quarry located to the northeast of the slough and a garbage dump to its east.

b. Has the site been used for agriculture? If so, describe.
The surrounding property to the south of Coal Creek Slough is zoned 'Agricultural Land' and much of this property is used for agricultural purposes.

c. Describe any structures on the site.
No structures exist within the project area other than the pile structures and derelict vessel proposed for removal. Properties in the surrounding area have structures allowed by zoning (e.g. residential structures). The only structure visible from the pile removal site is one small dock located on the south shore of the slough adjacent to the pile structures. No structures are visible from the derelict vessel.

d. Will any structures be demolished? If so, what?
Derelict pile structures and a derelict vessel will be removed from the site and disposed of in an environmentally sound manner.

e. What is the current zoning classification of the site?
Both the derelict vessel site and the pile structure field site are unzoned.

f. What is the current comprehensive plan designation of the site?
The surrounding property to the north of Coal Creek Slough, is designated 'Forest Open Space' with five acre minimum parcels. The property to the south of the slough is designated 'Agricultural Land'.

g. If applicable, what is the current shoreline master program designation of the site?
This question is not applicable to the proposed project per phone conversations with Sheldon Somers, Cowlitz County Environmental Planner.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
This question is not applicable to the proposed project per phone conversations with Sheldon Somers, Cowlitz County Environmental Planner.

i. Approximately how many people would reside or work in the completed project?
This question is not applicable to the proposed project.

j. Approximately how many people would the completed project displace?
This question is not applicable to the proposed project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

This question is not applicable to the proposed project.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This question is not applicable to the proposed project.

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

This question is not applicable to the proposed project.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

This question is not applicable to the proposed project.

c. Proposed measures to reduce or control housing impacts, if any:

This question is not applicable to the proposed project.

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

This question is not applicable to the proposed project.

b. What views in the immediate vicinity would be altered or obstructed?

The restoration project would improve the aesthetics of the slough through the removal of a derelict vessel and derelict pile structures.

c. Proposed measures to reduce or control aesthetic impacts, if any:

This question is not applicable to the proposed project.

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

This question is not applicable to the proposed project.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

This question is not applicable to the proposed project.

c. What existing off-site sources of light or glare may affect your proposal?

This question is not applicable to the proposed project.

d. Proposed measures to reduce or control light and glare impacts, if any:

This question is not applicable to the proposed project.

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?

The recreational opportunities available in the immediate vicinity are boating, fishing, canoeing, and swimming.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The proposed restoration project could affect recreational fishing use. This project seeks to improve juvenile salmonid habitat through a number of ways, and one of these ways is to decrease the habitat for predators of juvenile salmonids. Past studies have indicated that a number of fish species that prey upon juvenile salmonids have a strong habitat preference for pile structures. By removing pile structures there is the potential to decrease their habitat, which could increase the survival rate for juvenile salmonids. However, the reduction of piscivorous fish (e.g. Northern Pikeminnow) could displace fishermen who fish the slough for these species.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The proposed project seeks to increase juvenile salmonid survival, which in the long-term will be of benefit to recreational fishermen.

13. **Historic and cultural preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

According to the Washington Department of Natural Resource's Historic Preservation Officer, there are no national, state, or local preservation registers known to be on or next to the site.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

According to the Washington Department of Natural Resource's Historic Preservation Officer, there are no landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

c. Proposed measures to reduce or control impacts, if any:

This question is not applicable to the proposed project.

14. **Transportation**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Washington State Route 4 (Ocean Beach Highway) runs along portions of the north side of Coal Creek Slough. There are no public streets that directly access the sites. The sites are most appropriately accessed from the Columbia River.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

This question is not applicable to the proposed project.

c. How many parking spaces would the completed project have? How many would the project eliminate?

This question is not applicable to the proposed project.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No, the project will not require new road or improvements to existing roads.

Supplemental Sheet 4
Best Management Practices
For Pile Removal & Disposal

The following Best Management Practices (BMPs) are adapted from EPA guidance (2005), Washington State Department of Transportation (WSDOT) methods and conservation activities as included in Joint Aquatic Resources Protection Application (JARPA) 2005, and Washington State Department of Resources (WADNR) "Standard Practice for the Use and Removal of Treated Wood and Pilings on and from State-Owned Aquatic Lands" 2005.

The purpose of these BMPs is to control turbidity and sediments re-entering the water column during pile removal, and prescribe debris capture and disposal of removed piles and debris.

BMP 1. PILE REMOVAL

A. Vibratory extraction

1) This is the preferred method of pile removal.

2) 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 by vibrating as the piling is pulled up. The hammer is shut off when the end of the piling reaches the mudline. Vibratory extraction takes approximately 15 to 30 minutes per piling depending on piling length and sediment condition.

3) Crane operator shall be trained to remove pile slowly. This will minimize turbidity in the water column as well as sediment disturbance.

4) Operator will unseat the pile to break up bond with sediment.

- Vibrating breaks the skin friction bond between pile and soil.
- Bond breaking avoids pulling out a large block of soil – possibly breaking off the pile in the process.
- Usually there is little or no sediment attached to the skin of the pile during withdrawal. In some cases material may be attached to the pile tip, in line with the pile.

B. Direct Pull

1) This method is optional if the contractor determines it to be appropriate for the substrate type and structural integrity of the piling.

2) Pilings are wrapped with a choker cable or chain that is attached at the top to a crane. The crane pulls the piling directly upward, removing the piling from the sediment.

C. Clamshell Removal

1) Broken and damaged pilings that cannot be removed by either the vibratory hammer or direct pull shall be removed with either a clamshell bucket or environmental clamshell.

2) A clamshell 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.

3) The size of the clamshell bucket will be minimized to reduce turbidity during piling removal.

4) The clamshell bucket will be emptied of material onto a contained area on the barge before it is lowered into the water.

D. Cutting

1) Is required if the pile breaks off at or near the existing substrate and cannot be removed using a clamshell bucket.

2) Prior to commencement of the work the contractor will assess the condition of the pilings. Contractors will create a log outlining the location and number of pilings that need to be cut or broken off and have this log available to the agencies upon request.

3) Washington State Department of Fish and Wildlife (WDFW) will be consulted to determine if this is the preferred option at any specific site.

4) Every attempt will be made to completely remove the piling in its entirety before cutting. If a pile is broken or breaks above the mudline during extraction, one of the methods listed below should be used to cut the pile.

a. A chain should be used, if practical, to attempt to entirely remove the broken pile. (BMP 1-C)

b. If the entire pile cannot be removed, the pile should be cut at or below the mudline by using a pneumatic underwater chainsaw. Project-specific requirements for cutoff will be set by the project manager in consultation with WDFW and Washington Department of Ecology considering the mudline elevation and the presence of contaminants in the sediment. Generally, in subtidal areas with contaminated sediments, pilings should be cut off at the mudline to minimize disturbance of the sediment. In dry, intertidal areas, piling should be cut off at least 1 foot below the mudline. In uncontaminated, subtidal areas, piling should be cut off at least 1 foot below the mudline.

c. Piles shall be cut off at lowest practical tide condition and at slack water. This is intended to reduce turbidity due to reduced flow and short water column through which pile must be withdrawn.

d. In deep subtidal areas, if the piling is broken off below mudline greater than 1 foot, the piling may remain. In intertidal and shallow subtidal areas, seasonal raising and

lowering of the beach could expose the pilings above the mudline and leach out PAH's or other contaminants. In this case, the piling should be cut off at least two feet below the mudline if it is accidentally broken off during removal.

e. Depending on future use, the removal contractor will provide the location of the broken pile using GPS. This will be necessary as part of debris characterization should future dredging be a possibility in the area of piling removal.

BMP 2. BARGE OPERATIONS, WORK SURFACE, CONTAINMENT

A. Barge grounding will not be permitted within project areas over eelgrass beds.

B. Work surface on barge deck or pier shall include a containment basin for pile and any sediment removed during pulling.

1) Containment basin may be constructed of durable plastic sheeting with sidewalls supported by hay bales or support structure to contain all sediment. Water run off can return to the waterway.

2) Work surface on barge deck and adjacent pier shall be cleaned by disposing of sediment or other residues along with cut off piling as described in BMP #3.C below.

3) Containment basin shall be removed and disposed in accordance with BMP #3.C below or in another manner complying with applicable federal and state regulations.

4) Upon removal from substrate the pile shall be moved expeditiously from the water into the containment basin. The pile shall not be shaken, hosed-off, left hanging to drip or any other action intended to clean or remove adhering material from the pile.

5) During in-water work and extraction the vibratory hammer will be operated using vegetable oil.

6) Use of extraction equipment will only occur during daylight hours.

BMP 3. DISPOSAL OF PILING, SEDIMENT AND CONSTRUCTION RESIDUE

A. Pulled pile shall be placed in a containment basin to capture any adhering sediment. This should be done immediately after the pile is initially removed from the water.

1) Utilize basin set up on the barge deck or adjacent pier

2) Basin may be made of hay bales and durable plastic sheeting.

B. Piling shall be cut into 4' lengths with standard chainsaw.
1) All sawdust and cuttings shall be contained in the container.

C. Cut up piling, sediments, construction residue and plastic sheeting from containment basin shall be packed into container. For disposal, ship to Rabanco/Regional Disposal Subtitle D Landfill in Roosevelt, Washington.

BMP 4. DEBRIS CAPTURE IN WATER

A. A floating surface boom shall be installed to capture floating surface debris. Debris will be collected and disposed of along with cut off piling as described in BMP #3.C above.

B. The floating surface boom shall be equipped with absorbent pads to contain any oil sheens. Absorbent pads will be disposed as described in BMP #3.C above.

BMP 5. RESUSPENSION/TURBIDITY

A. Crane operator shall be trained to remove pile from sediment slowly.

B. Work shall be done in low water and low current, to the extent possible.

C. Removed piles shall be placed in a containment facility.

D. Sediments spilled on work surfaces shall be contained and disposed of with the pile debris at permitted upland disposal site.

E. Holes remaining after piling removal shall not be filled.

BMP 6. PROJECT OVERSIGHT

A. WADNR will have a project manager or other assigned personnel on site. Oversight responsibilities will include, but are not limited to the following:

1) Water quality monitoring to ensure turbidity levels remain within required parameters.

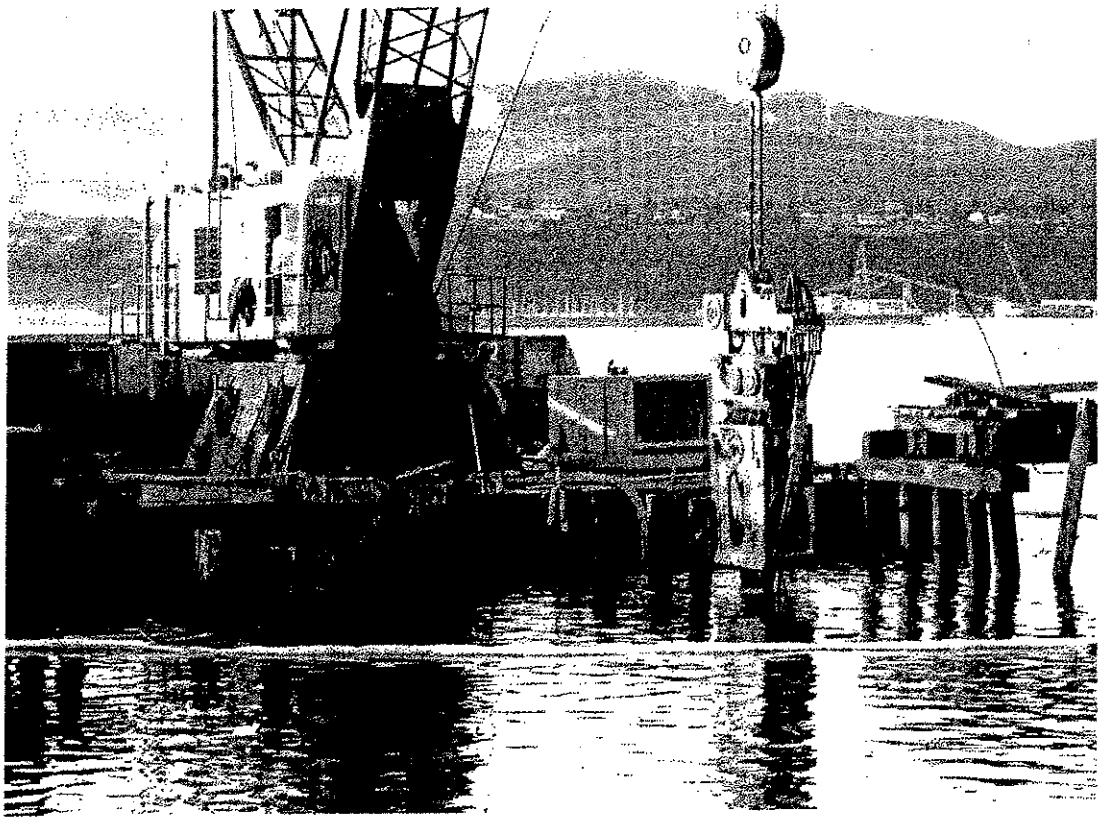
2) Ensure contractor follows BMPs

3) Ensure contractor is in compliance with contract and permit requirements

4) Ensure correct structures are removed

5) Maintain contact with regulatory agencies should issues or emergencies arise

Supplemental Sheet 5: Vibratory Extraction Method Photo



Supplemental Sheet 6
Best Management Practices
For Pile Removal & Disposal

The following Best Management Practices (BMPs) are adapted from EPA guidance (2005), Washington State Department of Transportation (WSDOT) methods and conservation activities as included in Joint Aquatic Resources Protection Application (JARPA) 2005, and Washington State Department of Resources (WADNR) "Standard Practice for the Use and Removal of Treated Wood and Pilings on and from State-Owned Aquatic Lands" 2005.

The purpose of these BMPs is to control turbidity and sediments re-entering the water column during pile removal, and prescribe debris capture and disposal of removed piles and debris.

BMP 1. PILE REMOVAL

A. Vibratory extraction

1) This is the preferred method of pile removal.

2) 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 by vibrating as the piling is pulled up. The hammer is shut off when the end of the piling reaches the mudline. Vibratory extraction takes approximately 15 to 30 minutes per piling depending on piling length and sediment condition.

3) Crane operator shall be trained to remove pile slowly. This will minimize turbidity in the water column as well as sediment disturbance.

4) Operator will unseat the pile to break up bond with sediment.

- Vibrating breaks the skin friction bond between pile and soil.
- Bond breaking avoids pulling out a large block of soil – possibly breaking off the pile in the process.
- Usually there is little or no sediment attached to the skin of the pile during withdrawal. In some cases material may be attached to the pile tip, in line with the pile.

B. Direct Pull

1) This method is optional if the contractor determines it to be appropriate for the substrate type and structural integrity of the piling.

2) Pilings are wrapped with a choker cable or chain that is attached at the top to a crane. The crane pulls the piling directly upward, removing the piling from the sediment.

C. Clamshell Removal

1) Broken and damaged pilings that cannot be removed by either the vibratory hammer or direct pull shall be removed with either a clamshell bucket or environmental clamshell.

2) A clamshell 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.

3) The size of the clamshell bucket will be minimized to reduce turbidity during piling removal.

4) The clamshell bucket will be emptied of material onto a contained area on the barge before it is lowered into the water.

D. Cutting

1) Is required if the pile breaks off at or near the existing substrate and cannot be removed using a clamshell bucket.

2) Prior to commencement of the work the contractor will assess the condition of the pilings. Contractors will create a log outlining the location and number of pilings that need to be cut or broken off and have this log available to the agencies upon request.

3) Washington State Department of Fish and Wildlife (WDFW) will be consulted to determine if this is the preferred option at any specific site.

4) Every attempt will be made to completely remove the piling in its entirety before cutting. If a pile is broken or breaks above the mudline during extraction, one of the methods listed below should be used to cut the pile.

a. A chain should be used, if practical, to attempt to entirely remove the broken pile. (BMP 1-C)

b. If the entire pile cannot be removed, the pile should be cut at or below the mudline by using a pneumatic underwater chainsaw. Project-specific requirements for cutoff will be set by the project manager in consultation with WDFW and Washington Department of Ecology considering the mudline elevation and the presence of contaminants in the sediment. Generally, in subtidal areas with contaminated sediments, pilings should be cut off at the mudline to minimize disturbance of the sediment. In dry, intertidal areas, piling should be cut off at least 1 foot below the mudline. In uncontaminated, subtidal areas, piling should be cut off at least 1 foot below the mudline.

c. Piles shall be cut off at lowest practical tide condition and at slack water. This is intended to reduce turbidity due to reduced flow and short water column through which pile must be withdrawn.

d. In deep subtidal areas, if the piling is broken off below mudline greater than 1 foot, the piling may remain. In intertidal and shallow subtidal areas, seasonal raising and

lowering of the beach could expose the pilings above the mudline and leach out PAH's or other contaminants. In this case, the piling should be cut off at least two feet below the mudline if it is accidentally broken off during removal.

e. Depending on future use, the removal contractor will provide the location of the broken pile using GPS. This will be necessary as part of debris characterization should future dredging be a possibility in the area of piling removal.

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A. Barge grounding will not be permitted within project areas over eelgrass beds.

B. Work surface on barge deck or pier shall include a containment basin for pile and any sediment removed during pulling.

1) Containment basin may be constructed of durable plastic sheeting with sidewalls supported by hay bales or support structure to contain all sediment. Water run off can return to the waterway.

2) Work surface on barge deck and adjacent pier shall be cleaned by disposing of sediment or other residues along with cut off piling as described in BMP #3.C below.

3) Containment basin shall be removed and disposed in accordance with BMP #3.C below or in another manner complying with applicable federal and state regulations.

4) Upon removal from substrate the pile shall be moved expeditiously from the water into the containment basin. The pile shall not be shaken, hosed-off, left hanging to drip or any other action intended to clean or remove adhering material from the pile.

5) During in-water work and extraction the vibratory hammer will be operated using vegetable oil.

6) Use of extraction equipment will only occur during daylight hours.

BMP 3. DISPOSAL OF PILING, SEDIMENT AND CONSTRUCTION RESIDUE

A. Pulled pile shall be placed in a containment basin to capture any adhering sediment. This should be done immediately after the pile is initially removed from the water.

1) Utilize basin set up on the barge deck or adjacent pier

2) Basin may be made of hay bales and durable plastic sheeting.

B. Piling shall be cut into 4' lengths with standard chainsaw.
1) All sawdust and cuttings shall be contained in the container.

C. Cut up piling, sediments, construction residue and plastic sheeting from containment basin shall be packed into container. For disposal, ship to Rabanco/Regional Disposal Subtitle D Landfill in Roosevelt, Washington.

BMP 4. DEBRIS CAPTURE IN WATER

A. A floating surface boom shall be installed to capture floating surface debris. Debris will be collected and disposed of along with cut off piling as described in BMP #3.C above.

B. The floating surface boom shall be equipped with absorbent pads to contain any oil sheens. Absorbent pads will be disposed as described in BMP #3.C above.

BMP 5. RESUSPENSION/TURBIDITY

A. Crane operator shall be trained to remove pile from sediment slowly.

B. Work shall be done in low water and low current, to the extent possible.

C. Removed piles shall be placed in a containment facility.

D. Sediments spilled on work surfaces shall be contained and disposed of with the pile debris at permitted upland disposal site.

E. Holes remaining after piling removal shall not be filled.

BMP 6. PROJECT OVERSIGHT

A. WADNR will have a project manager or other assigned personnel on site. Oversight responsibilities will include, but are not limited to the following:

1) Water quality monitoring to ensure turbidity levels remain within required parameters.

2) Ensure contractor follows BMPs

3) Ensure contractor is in compliance with contract and permit requirements

4) Ensure correct structures are removed

5) Maintain contact with regulatory agencies should issues or emergencies arise

Supplemental Sheet 7: Derelict Vessel

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
This question is not applicable to the proposed restoration project.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
This question is not applicable to the proposed restoration project.

g. Proposed measures to reduce or control transportation impacts, if any:
This question is not applicable to the proposed restoration project.

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection,. health care, schools, other)? If so, generally describe.
This question is not applicable to the proposed restoration project.

b. Proposed measures to reduce or control direct impacts on public services, if any.
This question is not applicable to the proposed restoration project.

16. **Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
This question is not applicable to the proposed restoration project.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
This question is not applicable to the proposed restoration project.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Melinda Marriott

Date Submitted: 2/2/08

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?
The derelict vessel was abandoned near the shoreline on the south side of Coal Creek Slough and its removal would improve access to that area of the shoreline.

Proposed measures to avoid or reduce shoreline and land use impacts are:
This question is not applicable to the proposed restoration project.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?
This question is not applicable to the proposed restoration project.

Proposed measures to reduce or respond to such demand(s) are:
This question is not applicable to the proposed restoration project.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

This proposal will not conflict with local, state, or federal laws or requirements for the protection of the environment. The long term goals of this project seek to improve the site's overall environmental condition.

Supplemental Sheet 1: Potner Approval

DUPLICATE

RIGHT OF ENTRY

FOR THE PURPOSES OF REMOVING A DERELICT OR ABANDONED VESSEL FROM PRIVATELY-OWNED TIDELANDS

Property Address: Parcel # WL1608001

Name (Owner): Ostrander Rock & Const. Co., Inc.

Name (Owner's Authorized Agent): Russell T. Portner

Right of Entry: I certify that I am the owner or the owner's authorized agent of the below described properties (Figure 1.) I grant freely and without coercion the right of access and entry to said properties to representatives of the Lower Columbia River Estuary Partnership, its contractors and sub-contractors, to remove the derelict/abandoned pilings. Access is granted for the time period starting from the date of this approval to September 2009. Right of access is contingent on the ability of the Lower Columbia River Estuary Partnership to provide proof of insurance for its contractors and subcontractors performing the restoration work.

Hold Harmless: I agree to hold harmless the Lower Columbia River Estuary Partnership and any of their contractors and subcontractors; and the State of Washington and any of their agencies and agents for any damage whatsoever, caused directly or indirectly, either to the below described properties, or to persons situated thereon. I release, discharge, and waive any action, either legal or equitable, that may arise by reason of any action of the above entities while removing derelict/abandoned vessel.

Sworn and Attested:

Printed Name: Russell T. Portner

Mailing Address: 6150 Ocean Beach Hwy.
Longview, Wa. 98632

Signature: Russell T. Portner

Date: 1-17-2008

Witnessed:

Printed Name: Rakie Eby

Mailing Address: 6150 Ocean Beach Hwy
Longview, Wa 98632

Signature: Rakie Eby

Date: 1-17-2008

Supplemental Sheet 2: Olson Approval

DUPLICATE

RIGHT OF ENTRY

FOR THE PURPOSES OF REMOVING A DERELICT OR ABANDONED VESSEL FROM PRIVATELY-OWNED TIDELANDS

Property Address: 265 Columbia Point Rd Longview, WA 98632

Name (Owner): Roger D. Olson

Name (Owner's Authorized Agent): _____

Right of Entry: I certify that I am the owner or the owner's authorized agent of Parcel WO1216002 displayed in Figure 1. I grant freely and without coercion the right of access and entry to said properties to representatives of the Lower Columbia River Estuary Partnership, its contractors and sub-contractors, to remove the derelict/abandoned vessel.

Sworn and Attested:	Witnessed:
Printed Name: Roger D Olson	Printed Name: Tammie Johnson
Mailing Address: P.O. Box 73	Mailing Address: 5480 Gobar Rd
Kelso WA 98626	Longview WA 98632
Signature: RD Olson	Signature: Tammie Johnson
Date: 2/21/08	Date: 2/21/08

Supplemental Sheet 3: Weyerhaeuser Approval

Sarah Wallace

DUPLICATE

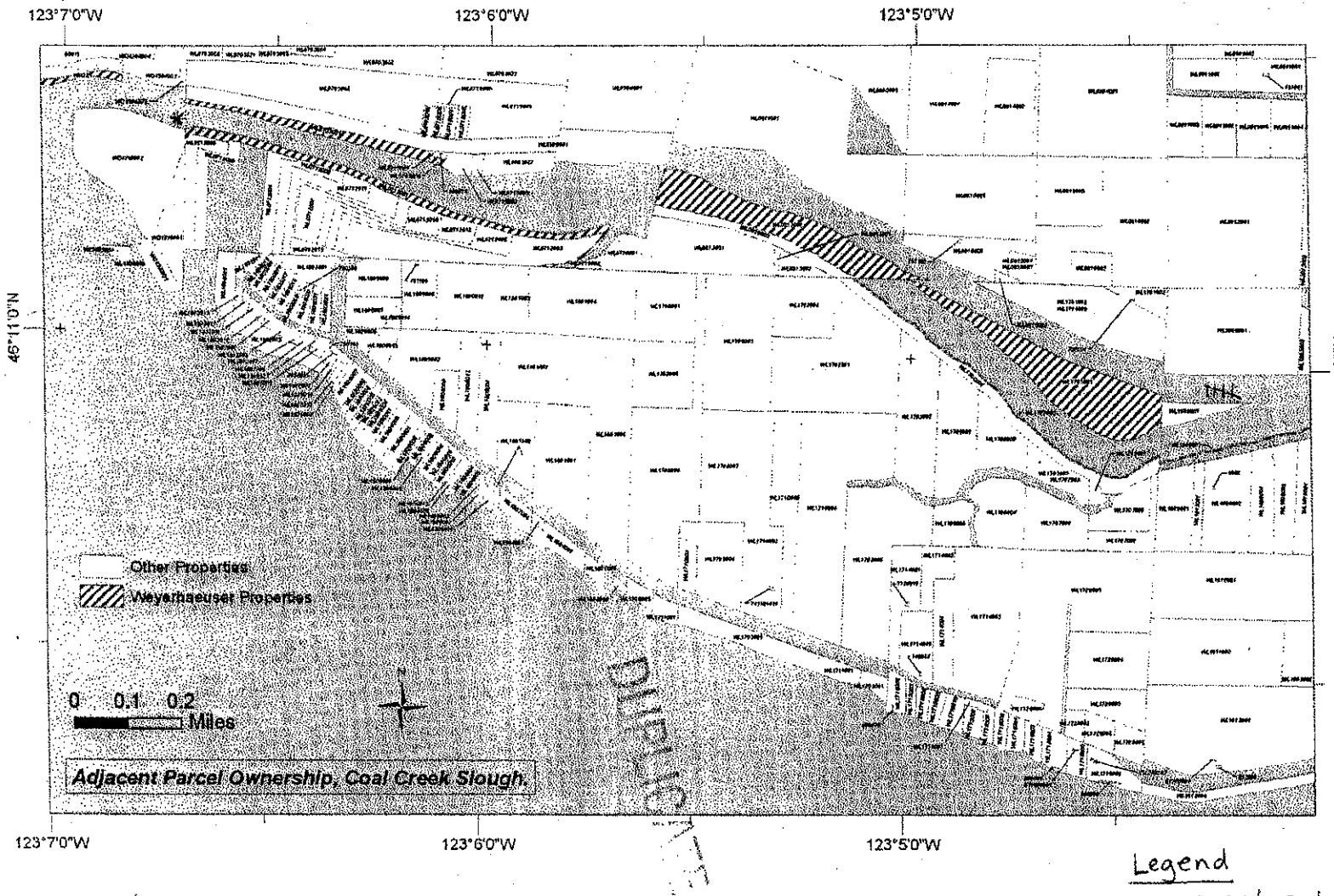
From: Graham, Ross [ross.graham@weyerhaeuser.com]
Sent: Tuesday, January 08, 2008 9:28 AM
To: Sarah Wallace
Subject: FW: Coal Creek Slough Access Follow up
Attachments: RIGHT OF ENTRY for accessing private property.doc

Sarah

I am relying on you to determine ownership, but to the extent that your recovery operation is on Weyerhaeuser ownership, and provided you have obtained all the necessary local, state, and federal permits and approvals for your operations, and it can be accomplished without damaging our property, permission is hereby granted to enter Weyerhaeuser property as requested.

Ross E. Graham
Forest Land Use Manager
St. Helens Tree Farm
Weyerhaeuser Company
P.O. Box 100, 500 Burma Road
Castle Rock, WA 98611
Tel (360) 274-3007
Cell (360) 430-0611
Fax (360) 274-4118
ross.graham@weyerhaeuser.com

Supplemental Sheet 4: Coal Creek Slough Project Map



Legend

* Derelict Vessel

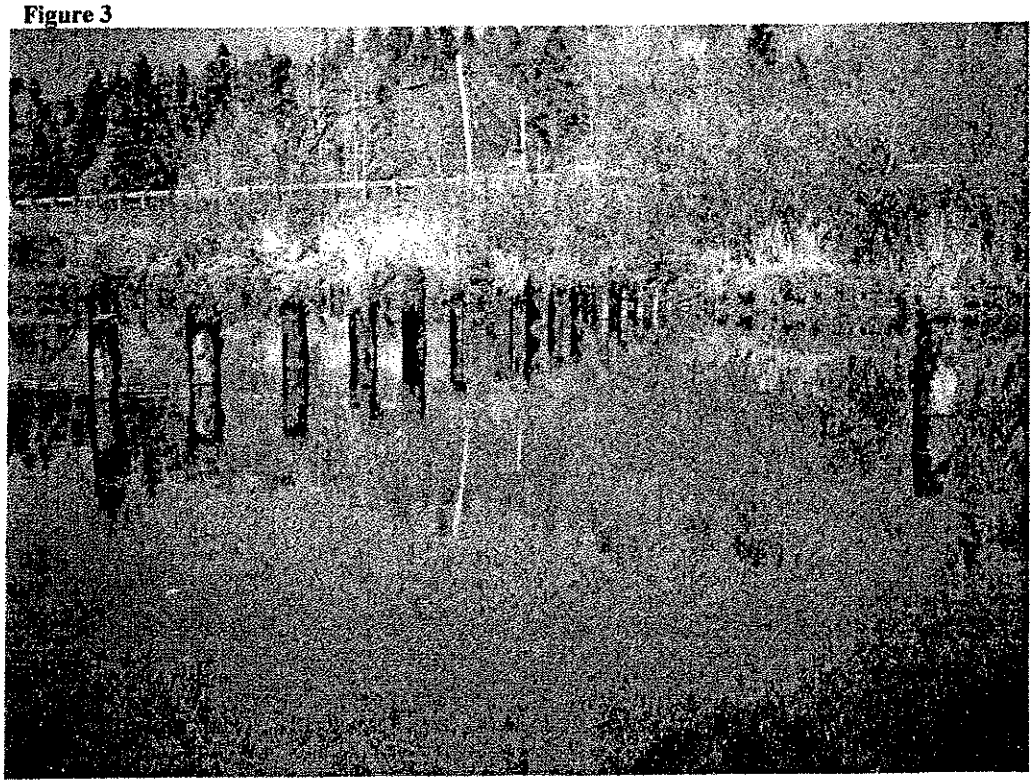
THL Pile Structure field

Supplemental Sheet 1: Coal Creek Slough Piling Field

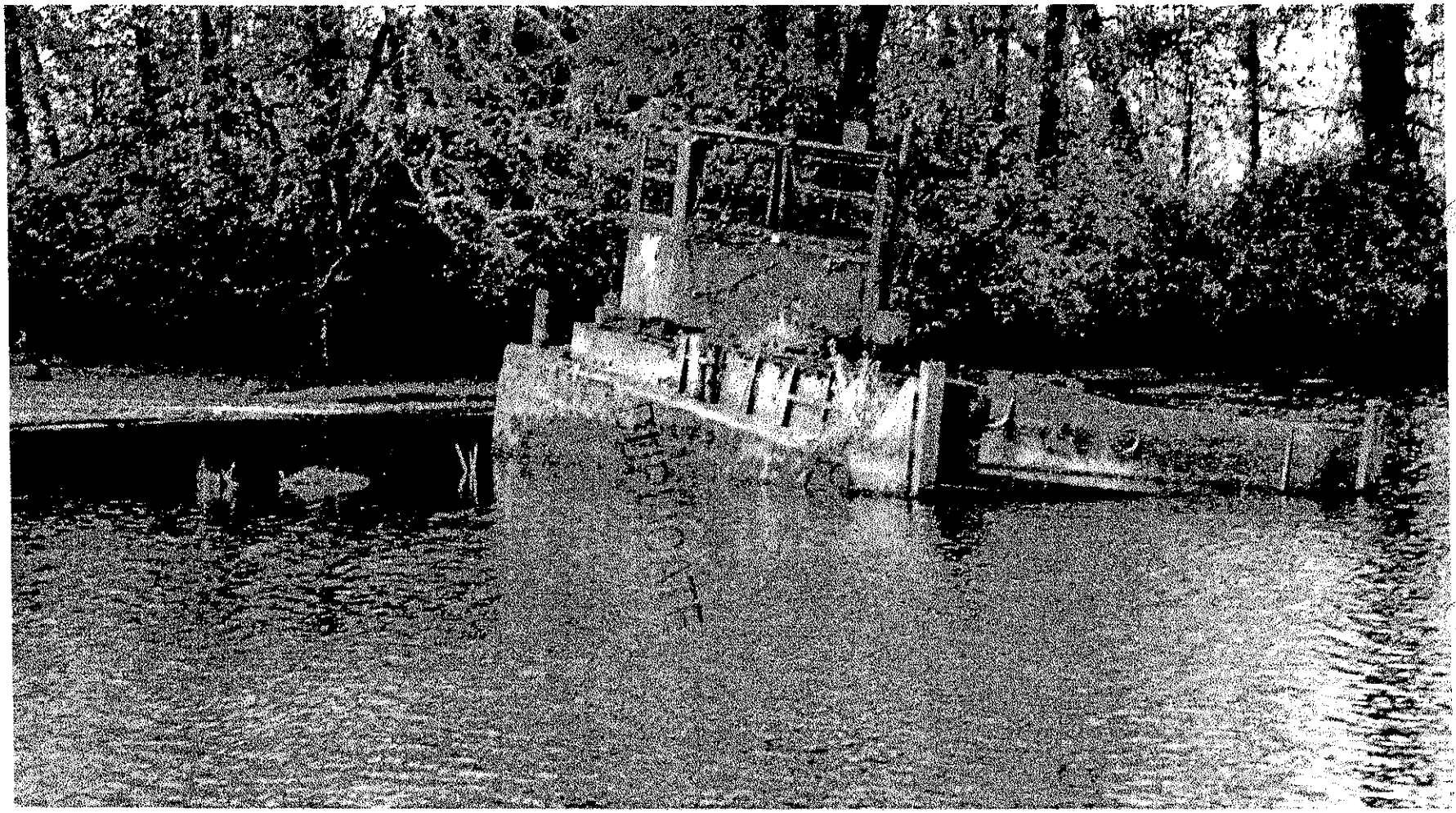
Figure 1

Figure 2

Figure 3



Supplemental Sheet 2: Derelict Vessel



Supplemental Sheet 2: Derelict Vessel

Figure 1

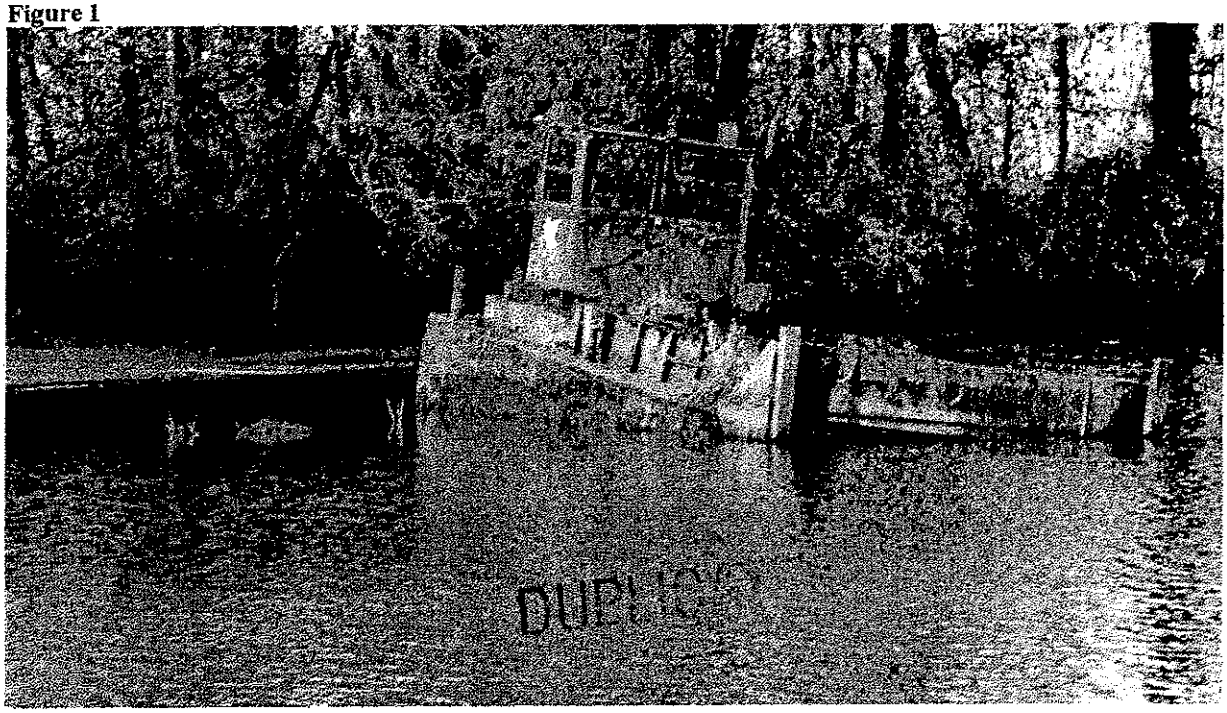
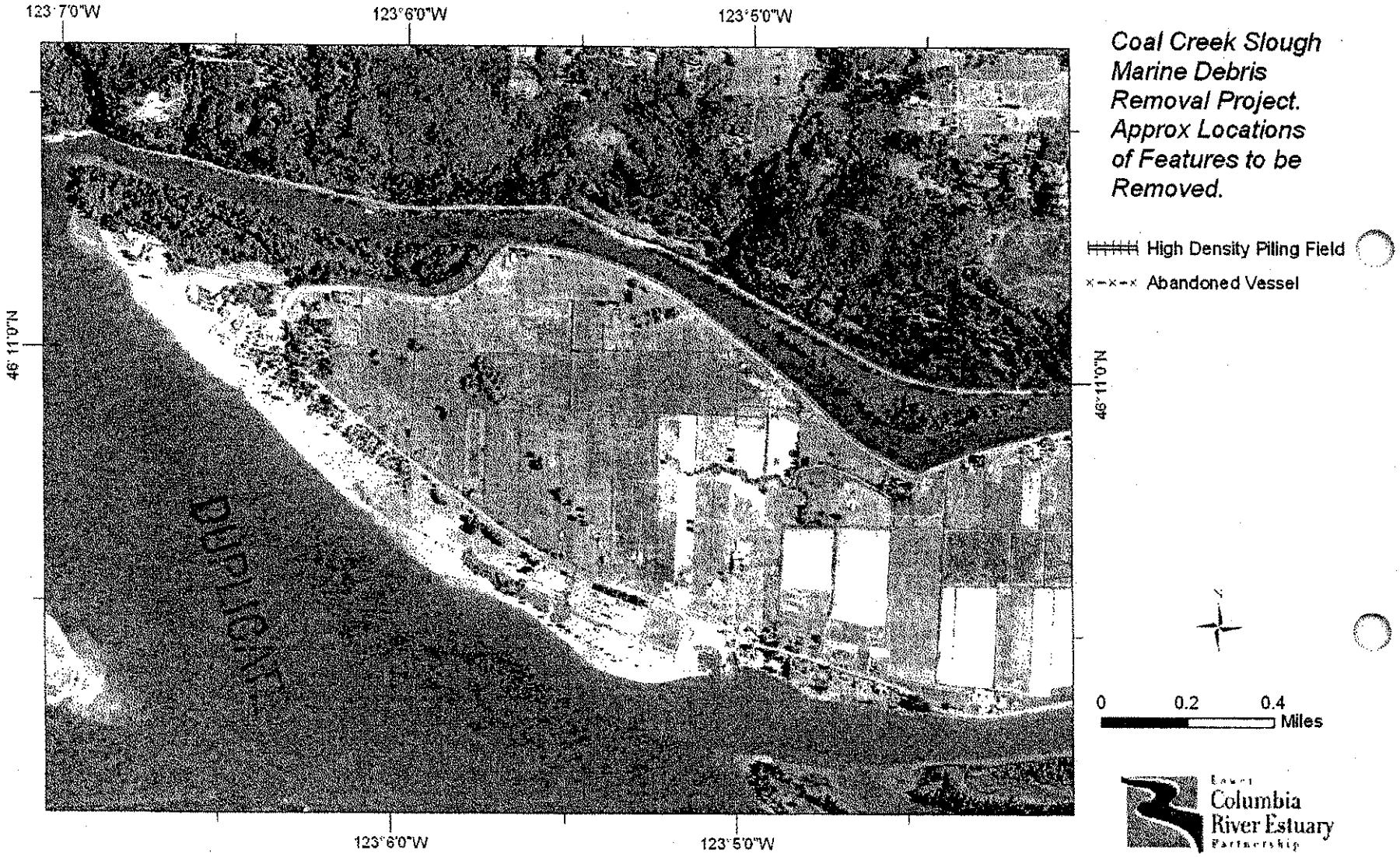


Figure 2

Supplemental Sheet 3: Site Map with Pile Structure Field and Derelict Vessel



AGENCY USE ONLY	JARPA FORM LAST UPDATED: March 19, 2007
Agency Reference #:	Date Received:
Circulated by:	(local govt. or agency) APR 28 2008
Project Tracking Number:	

Washington State JOINT AQUATIC RESOURCES PERMIT APPLICATION (JARPA) Form

HABITAT PROGRAM

Step 1: Get Ready	Step 2: Complete Form		Step 3: Check Work	Step 4: Copy and Send In
Go to www.epermitting.org for **correct form** and **instructions**.	Use **black ink**. Check correct permit boxes.	Use internet **"Help" buttons** to answer questions completely.	Use final review checklist at www.epermitting.org.	See **JARPA Contacts** at www.epermitting.org for correct mailing addresses.

☐ Fish Habitat Enhancement Projects per RCW 77.55.181. You must submit copy of completed JARPA form and Fish Habitat Enhancement JARPA Addition to your Local Government Planning Dep't and WA Dep't of Fish and Wildlife (WDFW) Area Habitat Biologist on same day. Note for Local Governments: You must submit comments to WDFW within 15 working days.

Based on instructions at www.epermitting.org, I am sending copies of this application to the following: *(check all that apply)*

☐ Local Government for Shoreline: ☐ Substantial Development ☐ Conditional Use ☐ Variance ☐ Exemption ☐ Revision ☐ Floodplain Management ☐ Critical Areas Ordinance

☒ Washington Department of Fish and Wildlife for Hydraulic Project Approval (Submit 2 copies to WDFW Region)

☒ Washington Department of Ecology for 401 Water Quality Certification (to Regional Office-Federal Permit Unit)

☒ Washington Department of Natural Resources for Aquatic Resources Use Authorization Notification

☒ Corps of Engineers for: ☒ Section 404 permit ☒ Section 10 permit

☐ Coast Guard for: ☐ General Bridge Act Permit ☐ Private Aids to Navigation (for non-bridge projects)

☐ For Department of Transportation projects only: This project will be designed to meet conditions of the most current Ecology/Department of Transportation Water Quality Implementing Agreement

PROJECT TITLE: Coal Creek Slough Pile Structure Removal Restoration Project

PROJECT DESCRIPTION: Coal Creek Slough is a low-flow, side-channel of the Columbia River and is located approximately 7 miles west of Longview, Washington. The Lower Columbia River Estuary Partnership is proposing a restoration project that involves removal of a derelict vessel and a 'pile structure field'. The derelict vessel is 42 feet in length and located near the mouth of Coal Creek Slough. The derelict vessel falls under the Washington Department of Natural Resources' (DNR) Derelict Vessel Removal Program, and 90% of the removal costs will be funded through this program. The pile structure field is comprised of approximately 30 timber pile structures located roughly 2 miles east of the mouth of Coal Creek Slough. The pile structures will be removed by following the Best Management Practices (BMP) attached to this application as Supplemental Sheet 4. The preferred removal method is vibratory hammer extraction.

SECTION A - Use for all permits covered by this application. Be sure to ALSO complete Section C (Signature Block) for all permit applications.

1. APPLICANT
Lower Columbia River Estuary Partnership – Debrah Marriott

MAILING ADDRESS
811 SW Natio Parkway, Suite 120 Portland, Oregon 97204

WORK PHONE	E-MAIL ADDRESS	HOME PHONE	FAX #
(503) 226-1565 ext. 227	Marriott@lcrep.org	n/a	(503) 226-1580

If an agent is acting for the applicant during the permit process, complete #2. Be sure agent signs Section C (Signature Block) for all permit applications

2. AUTHORIZED AGENT
Lower Columbia River Estuary Partnership - Sarah Wallace

MAILING ADDRESS
811 SW Natio Parkway, Suite 120 Portland, Oregon 97204

WORK PHONE	E-MAIL ADDRESS	HOME PHONE	FAX #
(503) 226-1556 ext. 226	wallace@lcrep.org		(503) 226-1580

3. Relationship of applicant to property: ☐ OWNER ☐ PURCHASER ☐ LESSEE ☒ Employee

4. Name, address and phone number of property owner(s) if other than applicant:

Russell Potner 6150 Ocean Beach Hwy Longview, WA 98632-9451 Phone: (360) 636-4430 Fax: (360) 636-4579 Email: n/a	Roger Olson 265 Columbia Point Rd. Longview, WA 98632-9291 Phone: (360)577-7213 Fax: (360) 425-6985 Email: n/a	Weyerhaeuser Company P.O. Box 190, 500 Burma Road Castle Rock, WA 98611 Phone: (360) 274-3057 Fax: (360) 274-4118 Email: ross.graham@weyerhaeuser.com

5. Location (street address, including city, county and zip code, where proposed activity exists or will occur)
Coal Creek Slough, Cowlitz County, Washington 98632

Local government with jurisdiction (city or county) Cowlitz County

Waterbody you are working in	Coal Creek Slough				Tributary of	Columbia River	WRIA #	25-26
Is this waterbody on the 303(d) List ☐ YES ☒ NO If YES, what parameter(s)?					Shoreline designation	Conservancy		
					Zoning designation	Unzoned		
¼ Section	Section 16	Township 8N	Range 3W	Government Lot n/a	DNR stream type if known	Type S		
Latitude and Longitude:	46° 11' 0" N 123° 4' 0" W				Tax Parcel Number	n/a		

6. Describe (a) the current use of the property, (b) structures existing on the property, and (c) existing environmental conditions. Have you completed any portion of the proposed activity on this property? ☐ YES ☒ NO
For any portion of the proposed activity already completed on this property, indicate month and year of completion.

(a) Coal Creek Slough is a side channel of the lower Columbia River and possible uses for the channel are fishing and boating. According to the Cowlitz County Planning Department, the surrounding property to the north of the slough is designated 'Forest Open Space' with five acre minimum parcels. The property to the south of the slough is designated 'Agricultural Land'. The actual uses of the surrounding properties could differ from what is designated by the Planning Department. Two land uses in the surrounding area, which could be affecting water quality, are a rock quarry located to the northeast of the slough and a garbage dump to its east.

(b) No structures exist within the project area other than the pile structures and derelict vessel proposed for removal. Properties in the surrounding area have structures allowed by zoning (e.g. residential structures). The only structure visible from the pile removal site is one small dock located on the south shore of the slough adjacent to the pile structures. No structures are visible from the derelict vessel.

(c) Coal Creek slough is a low-flow side channel of the Lower Columbia River. It is designated as fresh waters under WAC 173-201 A-602, which is found in the Washington Department of Ecology Water Quality Standards for Surface Waters of the State of Washington Chapter 173-201A WAC. Past developments of Longview, Washington have had a substantial affect on the slough and caused it to be highly manipulated. The channel has been diked, drained and riprapped to accommodate past agricultural practices and construction of Ocean Beach Highway, which parallels the north shore of the slough. Additionally, the rock quarry and garbage dump could be negatively impacting water quality and the overall environmental conditions of the slough. Despite these challenging environmental conditions, Coal Creek Slough provides off channel habitat for a variety of species including chinook, coho, steelhead, chum, sturgeon, and smelt.

Is the property agricultural land? ☐ YES ☒ NO (some of the surrounding property is designated as agricultural land by Cowlitz County) Are you a USDA program participant? ☐ YES ☒ NO

7a. Describe the proposed work that needs aquatic permits: Complete plans and specifications should be provided for all work waterward of the ordinary high water mark or line, including types of equipment to be used. If applying for a shoreline permit, describe all work within and beyond 200 feet of the ordinary high water mark. If you have provided attached materials to describe your project, you still must summarize the proposed work here. Attach a separate sheet if additional space is needed.

The proposed restoration project will enhance the ecological and aesthetic quality of Coal Creek Slough through the removal of a pile structure field and derelict vessel. The removal of these structures will not result in the loss of aquatic habitat, but will improve the functionality of Coal Creek Slough. Supplemental Sheet 1 is a photo of the pile structure field and Supplemental Sheet 2 is a photo of the derelict vessel. The locations of these structures and the two separate sites where in-water work will occur are shown on Supplemental Sheet 3. The proposed restoration project will occur during the approved June through September in-water work window, and likely take place during the later part of that window. We anticipate the duration of the in-water work to be less then 5 days. No site preparation work is anticipated.

Site 1: Pile Structure Field

The first site where in-water work will occur is a roughly 640 square feet area that contains 26 timber pile structures. A handful of additional pile structures are located 20-50 feet from this discrete pile structure field. If funding allows, an additional 4-8 pile structures will also be removed. Most pile structures are approximately 12 inches in diameter, but some range up to 16 inches. Width and depth of Coal Creek Slough at the project site are 100 feet by 20 to 25 feet.

Piles will be removed using BMPs outlined in Supplemental Sheet 4. The preferred method for extraction is vibratory extraction, which is a common method for removing both steel and timber piles. A vibratory hammer, a large mechanical device mostly constructed of steel (weighing 5 to 16 tons) and suspended from a crane by a cable is positioned onto a pile, the hammer is engaged and the crane slowly lifts the hammer, unseating the pile from the sediment. Once the pile is unseated, the crane will continue to raise the hammer and slowly pull the pile from the sediment. When the bottom of the pile reaches the mudline, the vibratory hammer will be disengaged. A choker cable connected to the crane will be attached to the pile, and the pile will be lifted from the water and placed on the barge. (See Supplemental Sheet 5 for photo of vibratory extractor, crane, and barge used for a pile removal project near Port Angeles, Washington). This process will be repeated for each pile structure. Extracted pile structures will be placed on the barge in a containment basin, constructed of durable plastic sheeting with side walls supported by hay bales or another support structure. They will then be transported to an appropriate disposal facility. Potential water quality impacts and habitat degradation resulting from this removal method will be discussed further in Question 7c.

In some cases, removal with the vibratory hammer is not possible because the pile will break apart due to the vibration, or the pile is already damaged because of its age or abuse to the structure. Timber piles are particularly prone to breaking at the mudline because of damage caused from marine borers and vessel impacts. Broken or damaged pile structures may be removed using a direct pull method of wrapping the individual pile with a choker cable and pulling it directly from the sediment with the crane. If the pile breaks between the waterline and the mudline, it could be removed with a clamshell bucket. Finally, if the pile breaks at or near the existing substrate and it can not be removed in its entirety then the pile structure will be cut using a pneumatic underwater chainsaw.

Site 2: Derelict Vessel

The second site where in-water work will occur is at the derelict vessel location. The vessel is 42 by 12 feet and is located near the mouth of Coal Creek Slough where the width is approximately 200 feet. Water depth at the vessel is 2 to 5 feet depending on river and tide levels but drops off steeply in the surrounding area. A crane will lift the derelict vessel from the shore and place it on a barge. The crane and barge used for the vessel removal will be the same equipment used for the pile structure removal.

Site Clean Up

Site clean-up will involve the disposal of the pile structures, derelict vessel, the floating surface boom used to capture any floating surface debris during pile removal, and any other debris associated with the removal of the structures. These materials will be transported from the site to the appropriate disposal facility. No materials will remain on the site after extraction is complete. A number of precautions will be taken to ensure the site is adequately stabilized. These precautions are outlined in detail in the Best Management Practices attached in Supplemental Sheet 4. They are also addressed in Question 7c during discussion on water quality and habitat degradation measures.

Site Access

The proposed project can be accessed from the lower Columbia River mainstem. We anticipate easy barge access up Coal Creek Slough to both the derelict vessel and the pile structure field. The project will not require a construction staging area or material storage area because immediately after the piles and vessel are extracted they will be placed on the barge and then transported to the appropriate disposal facility.

Site Stabilization

This is a removal project and will not involve in-water construction, installation of pile structures, or require removal of riparian/buffer vegetation. Finally, no bank modifications will be necessary, no utilities will be relocated or installed, and no water will be diverted during the implementation of the proposed restoration project.

PREPARATION OF DRAWINGS: See sample drawings and guidance for completing the drawings. ***ONE SET OF ORIGINAL OR GOOD QUALITY REPRODUCIBLE DRAWINGS MUST BE ATTACHED.*** NOTE: Applicants are encouraged to submit photographs of the project site, but these DO NOT substitute for drawings. ***THE CORPS OF ENGINEERS AND COAST GUARD REQUIRE DRAWINGS ON 8-1/2 X 11 INCH SHEETS. LARGER DRAWINGS MAY BE REQUIRED BY OTHER AGENCIES.***

7b. Describe the purpose of the proposed work and why you want or need to perform it at the site. Please explain any specific needs that have influenced the design.

The primary purpose of the proposed project is to remove a derelict vessel, 1 pile structure field, and prevent potential contaminants associated with these structures from entering the water column of Coal Creek Slough. Pile structure fields and to a lesser extent derelict vessels represent two of the many anthropogenic physical stressors common in the lower Columbia River and estuary. Removing these structure may improve juvenile salmonid habitat by improving sediment flow and water quality of the slough, reducing habitat for species such as Northern Pikeminnow and Cormorants that prey on juvenile salmon, and potentially removing a creosote contaminant source. (The pile structures may have been treated with creosote. Prior to removal the pile structures will be tested for creosote presence.) Finally, the pilings and vessel impede navigation within Coal Creek Slough and their removal will help reduce the amount of debris in the waterway and improve the aesthetic value of the slough.

7c. Describe the potential impacts to characteristic uses of the water body. These uses may include fish and aquatic life, water quality, water supply, recreation and aesthetics. Identify proposed actions to avoid, minimize, and mitigate detrimental impacts and provide proper protection of fish and aquatic life. Identify which guidance documents you have used. Attach a separate sheet if additional space is needed.

This project will result in a few immediate direct impacts to the Coal Creek Slough waterway, and a number of long-term, potentially positive direct and indirect impacts to Coal Creek Slough and the Columbia estuary as a whole.

The immediate impacts will result from the actual extraction of the pile structure field and the vessel. The preferred method for extraction of the pile structures is the use of a crane and vibratory hammer. Potential water quality impacts and habitat degradation resulting from the use of the vibratory hammer extraction method will be mitigated by using the BMPs (Supplemental Sheet 4). A vibratory hammer will unseat the piles and break the skin friction bond between the pile and the sediment. The crane operator will remove the piles slowly to minimize turbidity and disturbance in the water column, and the possibility of breaking the pile. Once removed, the piles will be placed immediately in the secure containment basin on the barge. Piles will not be shaken, hosed, left to drip or any other action intended to clean or remove material from the pile. This will minimize the potentially negative impacts of sediment or any contaminant associated with the pile from entering the water. A containment basin will contain the piles and all sediment generated from the removal of the piles. A floating surface boom will also be used to capture any floating surface debris, and all debris collected will be placed in the containment basin. All material in the contaminant basin will be transported to the closest appropriate disposal facility after extraction is complete.

Best Management Practices will help mitigate the potential negative impacts to water quality and the surrounding environment. Every effort will be made to prevent undue damage to the ecosystem. Nonetheless, some short-term impacts, such as suspended sediment and increased turbidity in localized areas could disrupt the localized environment. At certain levels, suspended sediment and turbidity may negatively impact fish species in the short-term.

Coal Creek, which drains into Coal Creek Slough, supports coho, steelhead, and chum. According to the Washington Department of Fish and Wildlife, adult chinook, juvenile coho, winter steelhead, and perhaps sturgeon could be present within Coal Creek Slough during the time period when the restoration project is likely to take place. However, currently, the number of fish species using the site, the life stages present, their abundance, and how they use the micro habitats surrounding the pile structure field are unknown. The Pacific Northwest National Laboratory (PNNL) is scheduled to perform baseline monitoring to assess these unknowns as well as the potential long-term positive impacts of the pile structure removal project.

To minimize any potential impacts to fish species during the project, the project will take place during the approved in-water work period when the fewest number of fish species will be present. Additionally, the derelict vessel will be inspected for stranded fish and amphibian species once it has been placed on the barge to help guarantee no species will be harmed and taken unknowingly.

Contaminant levels for the sediment surrounding the pile structures are unknown. The United States Geological Survey (USGS) will perform baseline monitoring on these sediments prior to the project's inception. If USGS finds

contaminated sediment these contaminants could be released into the water during pile structure extraction. This could result in a short-term increase of contaminant levels in Coal Creek Slough.

The removal of the derelict vessel and the use of the vibratory hammer will generate sound that exceeds the normal ambient noise of the surrounding environment. Species living in the water could be impacted by the increased noise, but this impact will be lessened by the project's short duration. Between 26 and 34 piles are schedule to be removed and on average the vibratory hammer is only engaged for 15-30 minutes or less per pile, depending on sediment conditions and length of piles. Land and air species could also be affected by the elevated ambient noise. However, these species already reside where noise levels exceed natural levels due to the Ocean Beach Highway running along portions of the northern boundary of Coal Creek Slough.

During the implementation of this project there is also the short-term risk of the barge leaking petroleum products during the mobilization and extraction. Every measure will be taken to ensure the highest quality professionals are selected to implement this restoration project and lessen the likelihood that such an event will take place. Another potential risk would be if fuel or any other contaminant on board the derelict vessel was to leak. This information is not known at this time. A dive operation will be completed to assess the overall integrity of the vessel and the status of any potential contaminants. If contaminants are found onboard the vessel, the area will be boomed to contain any potential spills. Finally, the barge should not be grounded for any reason, and all work will remain in-water. This will lessen the potential for habitat degradation and minimize any impact to the surrounding riparian vegetation or wildlife.

The known and potential short-term threats to the local environment are outweighed by the probable long-term benefits to Coal Creek Slough and the lower Columbia River and estuary as a whole. Potential benefits include: improving sediment flow and hydraulics in Coal Creek Slough, increasing velocity, reducing habitat for picivorous fish and birds that prey on juvenile salmonids, and removing a potential creosote source. This project is a pilot project designed to test the hypotheses associated with pile structure removal and help assess the positive and negative effects of this restoration technique. The lessons learned from this proposed project will help inform decisions regarding future pile structure restoration projects that would enhance the lower Columbia River and estuary ecosystem as a whole.

7d. For in-water construction work, will your project be in compliance with the State of Washington water quality standards for turbidity (WAC 173.201A-410)? ☐ YES ☒ NO

Monitoring is proposed at the pile structure removal site both during and post-removal. The USGS and PNNL would conduct the monitoring and if it appears water quality standards for turbidity are exceeded the Washington Department of Ecology will be contacted immediately.

8. Will the project be constructed in stages? ☐ YES ☒ NO

Proposed starting date: September 1, 2008

Estimated duration of activity: One week

9. Check if any temporary or permanent structures will be placed: NO

☐ Waterward of the ordinary high water mark or line for fresh or tidal waters AND/OR

☐ Waterward of the mean higher high water for tidal waters?

10. Will fill material (rock, fill, bulkhead, or other material) be placed: NO

☐ Waterward of the ordinary high water mark or line for fresh waters?
If **YES**, VOLUME (cubic yards) / AREA (acres)

☐ Waterward of the mean higher high water for tidal waters?
If **YES**, VOLUME (cubic yards) / AREA (acres)

11. Will material be placed in wetlands? ☐ YES ☒ NO

If **YES**:

A. Impacted area in acres: N/A

B. Has a delineation been completed? **If YES**, please submit with application. ☐ YES ☒ NO

C. Has a wetland report been prepared? **If YES**, please submit with application ☐ YES ☒ NO

D. Type and composition of fill material (e.g., sand, etc.) N/A

E. Material source: N/A

F. List all soil series (type of soil) locate the project site, and indicate if they are on the nty's list of hydric soils. Soils information can be obtained from the na Resources Conservation Service (NRCS). Material will not be placed in wetlands, this question is not applicable.

G. WILL PROPOSED ACTIVITY CAUSE FLOODING OR DRAINING OF WETLANDS? ☐ YES ☒ NO
If **YES**, IMPACTED AREA IS ACRES OF DRAINED WETLANDS.

NOTE: If your project will impact greater than 1/10 of an acre of wetland, submit a mitigation plan to the Corps and Ecology for approval along with the JARPA form.
NOTE: A 401 water quality certification may be required from Ecology in addition to an approved mitigation plan if your project wetland impacts are greater than 1/10 acre in size. Please submit the JARPA form and mitigation plan to Ecology for 401 certification review.

12. Stormwater Compliance: This project is (or will be) designed to meet ecology's most current stormwater manual, or an Ecology approved local stormwater manual. ☐ YES ☒ NO

If **YES** – Which manual will your project be designed to meet?

If **NO** – For Clean Water Act Section 401 and 404 permits only – Please submit to Ecology for approval, along with this JARPA application, documentation that demonstrates the stormwater runoff from your project or activity will comply with the water quality standards, WAC 173.201(A). The parameters of this project do not require that it meets the most current stormwater manual. Or an Ecology approved local stormwater manual

Ed Obrien of the Department of Ecology reviewed the parameters of this project and determined the nature of the project does not require stormwater compliance. He can be contacted at (360) 407-6438 if you have questions regarding this answer.

13. Will excavation or dredging be required in water or wetlands? ☐ YES ☒ NO

If **YES**:
A. Volume: (cubic yards) /area (acre)
B. Composition of material to be removed:
C. Disposal site for excavated material:
D. Method of dredging:

14. Has the State Environmental Policy Act (SEPA) been completed ☐ YES ☒ NO
SEPA Lead Agency: Upon preliminary inquiry it appears Washington Department of Natural Resources is the lead agency.
SEPA Decision: DNS, MDNS, EIS, Adoption, Exemption Decision Date (end of comment period)
SUBMIT A **COPY OF YOUR SEPA DECISION LETTER** TO WDFW AS REQUIRED FOR A COMPLETE APPLICATION

15. List other Applications, approvals or certifications from other federal, state or local agencies for any structures, construction discharges or other activities described in the application (i.e. preliminary plat approval, health district approval, building permit, SEPA review, federal energy regulatory commission license (FERC), Forest practices application, etc.). Also, indicate whether work has been completed and indicate all existing work on drawings. NOTE: For use with Corps Nationwide Permits, identify whether your project has or will need an NPDES permit for discharging wastewater and/or stormwater.

TYPE OF APPROVAL	ISSUING AGENCY	IDENTIFICATION NO.	DATE OF APPLICATION	DATE APPROVED	COMPLETED?
ESA Consultation	NOAA for pile structure removal & Corps. for derelict vessel removal		TBA		N
Section 106 Historical Preservation	To Be Determined (possibly NOAA)		TBA		N
Hydraulic Project Approval	WA Dept. of Fish & Wildlife		02/22/2008		N
SEPA	WA Dept. of Natural Res.		02/22/2008		N
Aquatic Resources Use Authorization	WA Dept. of Natural Res.		02/22/2008		N

16. Has any agency denied approval for the activity you're applying for or for any activity directly related to the activity described herein?
☐ YES ☒ NO
If **YES**, explain:

SECTION B - Use for Shoreline and Corps of Engineers permits only:

17a. Total cost of project. This means the fair market value of the project, including materials, labor, machine rentals, etc.
The total cost of the project is $200,830, which includes the derelict vessel removal, the pile structure removal, and all other associated

activities (including community outreach, s[illegible]es, etc). National Oceanic and Atmospheric [illegible]nistration (NOAA) through their Marine Debris Removal and Prevention Program [illegible]oviding $100,000. The remaining $101,830 w[illegible] provided by non-federal cost share and in-kind contributions. The Lower Columbia River Estuary Partnership and the Washington Department of Natural Resource's Derelict Vessel Removal Program will contribute towards the cost share.

17b. If a project or any portion of a project receives funding from a federal agency, that agency is responsible for ESA consultation. Please indicate if you will receive federal funds and what federal agency is providing those funds.

FEDERAL FUNDING [X] YES [ ] NO If **YES**, please list the federal agency. NOAA awarded the Lower Columbia River Estuary Partnership a grant through their Marine Debris Removal and Prevention Program to fund the pile structure removal portion of the project.

18. Local government with jurisdiction:	Cowlitz County

19. Provide names, addresses and telephone numbers of adjoining property owners, lessees, etc. ***Please note:*** *Shoreline Management Compliance may require additional notice -- consult your local government.*

NAME	ADDRESS	PHONE NUMBER
Russell Potner	6150 Ocean Beach Hwy Longview, WA 98632-9451	(360) 636-4430
Roger Olson	265 Columbia Point Rd. Longview, WA 98632-9291	(360)577-7213
Weyerhaeuser Company	P.O. Box 190, 500 Burma Road Castle Rock, WA 98611	(360)274-3057

SECTION C - This section MUST be completed for any permit covered by this application

20. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work **ONLY** after all necessary permits have been received.

[signature] SIGNATURE OF APPLICANT	DATE 2008
SIGNATURE OF AUTHORIZED AGENT	DATE

I HEREBY DESIGNATE_____TO ACT AS MY AGENT IN MATTERS RELATED TO THIS APPLICATION FOR PERMIT(S). I UNDERSTAND THAT IF A FEDERAL PERMIT IS ISSUED, I MUST SIGN THE PERMIT.

SIGNATURE OF APPLICANT DATE

SIGNATURE OF LANDOWNER (EXCEPT PUBLIC ENTITY LANDOWNERS, E.G. DNR)

THIS APPLICATION MUST BE SIGNED BY THE APPLICANT AND THE AGENT, IF AN AUTHORIZED AGENT IS DESIGNATED.

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.

COMPLETED BY LOCAL OFFICIAL

A. Nature of the existing shoreline. (Describe type of shoreline, such as marine, stream, lake, lagoon, marsh, bog, swamp, flood plain, floodway, delta; type of beach, such as accretion, erosion, high bank, low bank, or dike; material such as sand, gravel, mud, clay, rock, riprap; and extent and type of bulkheading, if any)

B. In the event that any of the proposed buildings or structures will exceed a height of thirty-five feet above the average grade level, indicate the approximate location of and number of residential units, existing and potential, that will have an obstructed view:

C. If the application involves a conditional use or variance, set forth in full that portion of the master program which provides that the proposed use may be a conditional use, or, in the case of a variance, from which the variance is being sought: