WAC 197-11-970
DETERMINATION OF NONSIGNIFICANCE
LAKE RIVER SEDIMENT REMEDIATION
RIDGEFIELD, WA

Description of proposal:

Under a Consent Decree between the Department of Ecology (Ecology), Port of Ridgefield (Port), and City of Ridgefield, the Port proposes to remediate contaminated sediments in Lake River offshore of the Port's property at 111 Division Street in Ridgefield, Clark County, Washington. Lake River is a tidally influenced tributary emanating from Vancouver Lake and discharging to the Columbia River via Bachelor Slough. The sediment remediation is part of the cleanup of the Pacific Wood Treating toxic cleanup site in Ridgefield, Washington. Sediments in the river became contaminated from operations of the former Pacific Wood Treating company, which operated from 1964 to 1993.

The purpose of the remedial action is to reduce risks to humans and the environment resulting from the presence elevated levels of chlorinated dibenzo-p-dioxins and dibenzofurans (dioxins). The remedial action was selected by Ecology in accordance with the Model Toxics Control Act, Washington Administrative Code 173-340-380. The design for and the basis of the remedial action are provided in the Pacific Wood Treating Cleanup Action Plan from November 5, 2013.

The selected cleanup for Lake River includes:

- Demolishing some in-water structures, removing pilings, and removing in-water and shoreline debris.
- Constructing a staging and sediment handling area on the upland close to the dredging area.
- Removing the most contaminated sediments using precision mechanical dredging.
- Water quality monitoring during in-water activities.
- Transporting and disposing of contaminated sediments at a regulated landfill.
- Placing clean sands over dredged areas to control residual materials generated from the dredging process and to enhance the process of natural recovery.
- Placing clean sands over areas with lower contamination (but above cleanup levels), outside of the dredging zone.
- Placing filter fabric and a stabilization layer consisting of rounded gravels and cobbles resistant to erosion between the toe of the beach slope to approximately Ordinary High Water along the site shoreline. Turf reinforcement mats will be placed on the bank above the fish mix to protect against erosion during high water events.
- Implementing a Riparian Enhancement Plan to provide native vegetation along the embankment slopes and top of the bank.
- Treating, monitoring, and discharging to Lake River of water from the dredging process.
- In-water work will be performed under the U.S. Army Corps of Engineers, Nationwide Permit #38.

Project proponent:
Port of Ridgefield, under Consent Decree with Ecology (Consent Decree No. 13-2-03830-1, filed in Clark County Superior Court, November 5, 2013).

Location of proposal
Lake River adjacent to Port property located at 111 Division Street, Ridgefield, WA 98642.

Lead Agency
Washington State Department of Ecology

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2)(c). This decision was made after review of a completed environmental checklist and other information on file with Ecology. This information is available to the public on request.

Compliance with requirements of local and state permits
Because the project is being completed under a Model Toxics Control Act Consent Decree, the Port is not required to obtain local or state permits that would otherwise be required for this type of work. However, Ecology must ensure that the project meets the substantive requirements of local and state permits. The SEPA checklist describes the substantive requirements for local and state permits.

☐ There is no comment period for this DNS.

☐ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

☒ This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted by April 25, 2014.

Comments should be directed to Joyce Mercuri, Site Manager, at Joyce.Mercuri@ecy.wa.gov, or P. O. Box 47775, Olympia, WA 98504-7775

Responsible official: Rebecca Lawson, P.E., LHG
Position/title: Section Manager, Toxic Cleanup Program/Southwest Regional Office, WA State Department of Ecology
Phone: (360) 407-6241
Address: P.O. Box 47775, Olympia, WA 98504-7775

Date 4/16/14 Signature Rebecca S. Lawson

SEPA Environmental Checklist
Pacific Wood Treating Cleanup Action Plan

WAC 197-11-960 Environmental checklist.

A. BACKGROUND

1. Name of proposed project, if applicable:

Lake River Remedial Action

2. Name of applicant:

Port of Ridgefield

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

Brent Grening, Executive Director
Port of Ridgefield
PO Box 55
111 W. Division Street
Ridgefield, WA 98642
Tel: (360) 887-3873

4. Date checklist prepared:

April 1, 2014

5. Agency requesting checklist:

Washington State Department of Ecology (Ecology)

6. Proposed timing or schedule (including phasing, if applicable):

The Port anticipates proceeding with staging area construction in summer of 2014 and the Lake River remedial action (sediment dredging and bank stabilization) during the in-water work window of October 1, 2014 through January 15, 2015.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The former PWT site includes the Port of Ridgefield Lake River Industrial Site (LRIS), now known as Miller's Landing. The current in-water remedial action is part of the larger cleanup being conducted by the Port of Ridgefield at the former Pacific Wood Treating Co. (PWT) site. Cleanup is being conducted according to the requirements of the Cleanup Action Plan (CAP), within the November 5, 2013 Consent Decree (No. 13-2-03830-1) between Department of Ecology, Port of Ridgefield, and City of Ridgefield. The majority of the upland cleanup on the LRIS has been completed. Future development activities at the LRIS after this cleanup action are described in the Port of Ridgefield 2008 Comprehensive Scheme of Harbor Improvements.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Substantial environmental documentation has been prepared for the LRIS regarding the soil, groundwater, and sediment contamination caused by a former Port tenant, Pacific Wood Treating Co.

Applicable to this requested action, a Remedial Investigation/Feasibility Study has been prepared and accepted by Ecology. A CAP describing required cleanup actions was issued by Ecology as an attachment to the Consent Decree. A pre-design sampling report and draft engineering report were also submitted to Ecology.

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.

The Port has applied for a U.S. Army Corps of Engineers permit for dredging of sediment within Carty Lake, which is adjacent to Port property. The Carty Lake project will include a temporary access road across the Port property, construction of a gravel access ramp between the LRIS and Carty Lake and, construction of the sediment handling area discussed in this checklist. The Port has also acquired permits for future development. The current action is discrete from the future development; however, conditions of the future development permits incorporate remedial actions.

10. List any government approvals or permits that will be needed for your proposal, if known.

Clean Water Act Section 404 permit and Section 10 Rivers and Harbors Act authorization—U.S. Army Corps of Engineers (COE). The Port submitted a Joint Aquatic Resources Permit Application (JARPA) to the COE for the Section 404 Permit on September 23, 2013. The COE determined that a Nationwide Permit #38 applies to this project as it will be conducted under a Consent Decree. The COE established an in-water work window of October 1, 2014 through January 15, 2015.

National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit—Ecology. The Port is preparing the application for the construction stormwater general permit to submit to Ecology. This application will include a site-specific stormwater pollution prevention plan.

Right of Entry—Washington State Department of Natural Resources (DNR). The Port provided DNR with the JARPA on September 23, 2013.

Endangered Species Act (ESA) and Magnuson-Stevens Fishery Conservation and Management Act consultation—National Oceanic and Atmospheric Administration Fisheries Service (NOAA-Fisheries). On November 20, 2013, the COE requested an informal consultation by NOAA-Fisheries under Section 7 of the ESA and the Magnuson-Stevens Fishery Conservation Act. The COE determined that the proposed project "may affect, not likely to adversely affect" ESA-listed species. As of this writing, NOAA-Fisheries has not issued a finding for this project.

Demonstration of compliance with the National Historic Preservation Act through coordination with COE and Washington State Department of Archaeology and Historic Preservation (DAHP). The COE has engaged DAHP and affected tribes. The remedial action likely will be conducted under a cultural resources monitoring plan. State compliance will be addressed through federal permitting requirements.

Consistent with MTCA requirements for remedial actions conducted under a Consent Decree (WAC 173-340-710(9)(b)), the project is exempt from the procedural requirements of certain local and state laws, permits, and approvals. Ecology has solicited substantive requirements that will be met for Hydraulic Project Approval from Washington Fish and Wildlife and for City of Ridgefield Shoreline Management permits. Substantive requirements for Water Quality Certification from Ecology will be met (see the Attachment for local and state substantive requirements). The Port will obtain a City of Ridgefield grading/erosion control permit.

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.)

The project involves dredging contaminated sediment in areas exceeding remediation levels, with placement of clean sand to enhance the recovery of low-level contamination, and bank stabilization. Existing in-water structures will be removed prior to dredging. These include remnants of infrastructure from historical LRIS river operations such as dolphins, pilings, and a dock. The pilings may be replaced upon completion of the remedy. The dredging and bank areas consists of approximately 13.3 acres: 4.5 acres above jurisdictional ordinary high water (OHW) of 14 feet National Geodetic Vertical Datum of 1929 (NGVD) and 8.8 acres below OHW.

Dredging and ENR Placement
Dredging in a maximum 3.3 acre area will be conducted in a manner that minimizes contaminant release/resuspension and formation of residuals using a method that limits turbidity in Lake River and the potential

for off-site release of contaminants. Debris booms and a supporting work boat will be deployed when existing structures and debris are being removed from the waterway. The boom and boat will capture any debris freed during the removal process for disposal. All fueling of marine equipment will take place within a floating sorbent boom or over sorbent pads away from the edge of the barges and derricks. Fueling will be performed in a manner that will not result in a release to the waterway.

Clean sand for enhanced natural recovery (ENR) will be placed over approximately 7.0 acres in Lake River by mechanical means, using a barge-mounted crane and clamshell bucket. Conservative estimates indicate that after dredging, mixing of the ENR sand layer with the remaining sediment will effectively lower the surficial concentrations of contamination to meet cleanup levels.

Best management practices (BMPs) for water quality will be implemented during construction activities and all in-water construction activities will be monitored consistent with an Ecology-approved water quality monitoring plan. Water generated from the dredging operation will be treated in an upland water treatment facility constructed for that purpose, and discharged back to Lake River.

Bank Treatment

The Lake River project involves bank stabilization and removal of degraded in-water and over-water structures. The Lake River bank within the project area will be covered with a geotextile filter fabric and a fish mix rock stabilization layer from approximately elevation +11 National Geodetic Vertical Datum of 1929/1947 (NGVD) (and up to +18 NGVD in certain areas) to the toe of the bank slope (covering approximately 2.8 acres total). Turf reinforcement mat (TRM) will be placed above the fish mix layer to protect against erosion during high water events. Where the bank treatment work intersects with the existing upland soil cap, measures will be taken to preserve the integrity of the cap and to repair/replace any areas that are disturbed. The new embankment will be planted with native vegetation according to a Riparian Enhancement Plan approved by the COE.

Where possible, the design includes elements to reflect a more natural appearance and to provide greater habitat value. Additional benefits will include: removal of nonnative, invasive, noxious plants from the project site; improved habitat for benthic aquatic organisms; improved public access to nearshore areas; and more aesthetically pleasing views of the shoreline. .

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 project is located in and adjacent to Lake River and on the Port of Ridgefield upland and Department of Natural Resources aquatic land. It can be reached from the Port of Ridgefield property located at 111 Division St in Ridgefield, Washington. The LRIS property is located in the northwest quarter and northeast quarter of section 24, township 4 north, range 1 west of the Willamette Meridian.

Please refer to the site figure included with this SEPA Checklist.

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): ~~Flat, rolling, hilly, steep slopes, mountainous,~~ other . . . . Sloped shoreline relatively flat river bottom

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

100% slope, on some sections of the embankment.

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.

Native silt with some sand and rock from historic fill

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

Some erosion along shore embankment

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

Approximately 10,500 cubic yards of soil will be removed from a 2 acre area for construction of the sediment handling and staging area (to be conducted in Summer of 2014 in association with the related Carty Lake Dredging project). Soils to be removed will be placed in a covered stockpile on the LRIS. The soil will be replaced at the end of the project and the area will be stabilized with straw mulch and seeded.

Clean fill will be placed on the shoreline up to elevation +18 NGVD. As described above, the purpose of the fill is to contain contaminated soils on the Lake River shoreline, and to stabilize the bank from erosion. A maximum of 14,000 cubic yards of preferred gravel substrates mixed with larger river cobbles, referred to as fish mix, will be placed at a minimum of 2 feet thick on the lower bank with a final slope of no greater than 4H:1V. Fish mix will be sourced from a local quarry. A maximum of 13,000 cubic yards of clean sand will be placed in a 1 foot layer over all dredged areas as well as areas of low level contamination. Sand is likely to be sourced from the Columbia River mid-channel maintenance dredge sand and will be analyzed for the standard list of sediment evaluation framework chemicals of concern and dioxins to confirm that the material is not contaminated.

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

Best management practices will be employed to ensure that erosion does not occur as a result of clearing, construction or use. The project is intended to reduce the possibility of erosion by adding the fish mix rock stabilization layer over the existing bank, resulting in a more gradual slope as well as capping some bank soils with turf reinforcement mat (TRM) as appropriate. Debris removal will occur only within the in-water portions of the project area. No activities that would generate erosion are anticipated above OHW.

A temporary upland construction staging area will be constructed within the LRIS. This staging area will be configured in compliance with the applicable Washington State Erosion Control standard(s).

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

None

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

Erosion control will be provided as needed, following the applicable Washington State standards and requirements of the Construction Stormwater General NPDES Permit.

2. 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.

Short-term air emissions are expected to be limited to diesel and gasoline engine emissions from heavy equipment used for dredging, placement, and disposal of material. No long-term emissions form this proposed action will occur.

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

No. Sources of air emissions in the project area include vehicle and boat traffic. These emissions will not affect the proposal.

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

No impacts to air quality are anticipated as a result of this project, therefore no measures to control emissions are proposed.

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 project is located on the Lake River shoreline and in Lake River.

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 project will require work over and in Lake River and on the shoreline of Lake River. A project description has been provided in Section A 11, above.

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.

The project will remove approximately 14,000 cubic yards of material through dredge activities in Lake River. A maximum of 13,000 cubic yards of clean Columbia River Center Channel dredge sand will be placed in an approximately 1-foot layer over areas dredged (to manage residuals) and over areas exceeding cleanup levels. A maximum of 14,000 cubic yards of fish mix will be placed from the bottom of the bank slope up to the ordinary high water line (at a minimum) for bank stabilization.

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

The project will not require surface water withdrawal or diversion.

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

The project lies entirely within the floodplain. Please refer to the attached Figure.

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 involve discharge of waste material to surface water. Precision dredging best management practices, including use of a closed dredge bucket, will be employed to eliminate potential for discharge of dredged sediments to water. Water generated from the dredging process will be treated and monitored consistent with the Ecology-approved water quality plan.

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.

No. The in-water work will not result in the withdrawal of or discharge to the groundwater.

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.

No waste material will be discharged in the groundwater. No septic or sewage system is proposed.

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.

Water will be generated by the dredging process. Water will be collected and treated for turbidity and organic contaminants by an onsite water treatment system prior to discharge back into Lake River and will meet substantive water quality requirements. A sediment handling and dewatering area will be constructed on an upland portion of the LRIS. Any stormwater that collects within the sediment handling and dewatering area will not run off from the handling area but will be treated by the onsite water treatment system prior to discharge into Lake River.

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

The purpose of the planned project is to ensure that contaminated sediments are removed from the river. Adherence to substantive water quality requirements will limit the transport of contaminated materials in surface water. Precision dredging best management practices, including use of a closed dredge bucket, will be employed to eliminate potential for discharge of dredged sediments to water. Water generated from the dredging process will be treated and monitored consistent with the Ecology-approved water quality plan.

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

Fish mix will be added to the bank from at or above the ordinary high water line down the slope to provide long-term stability and erosion control. TRM will be placed above the fish mix layer to the existing gravel trail to protect against erosion during high water events. No excavation is planned for the bank work; however, during construction of the bank stabilization components, care will be taken, through use of plastic sheeting, mulch, straw, and/or other acceptable measures, to protect any disturbed areas from resulting in sediment-laden water, loose soil, or other materials from being discharged to Lake River. A stormwater pollution prevention plan will be developed in accordance with the requirements of the Construction Stormwater General NPDES permit.

*4. **Plants***

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

X *deciduous tree: alder, maple, aspen, other*

____ *evergreen tree: fir, cedar, pine, other*

X *shrubs*

X *grass*

____ *pasture*

____ *crop or grain*

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

____ *water plants: water lily, eelgrass, milfoil, other*

____ *other types of vegetation*

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

All existing vegetation will be removed as result of dredging and bank stabilization activities. As described in the January 17, 2014 Revised Lake River Riparian Enhancement Plan, existing vegetation is primarily non-native. Native plantings are proposed following remedial work, and will provide the COE-required compensation (2:1 mitigation ratio based on lineal feet) for unavoidable impacts to aquatic resources, including existing vegetation.

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

No federally listed threatened or endangered plant species are expected to occur within the project area during project activities, based on the Lake River Biological Evaluation submitted as part of the JARPA. The COE determined that the proposed project "may affect, not likely to adversely affect" ESA-listed fish species.

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

Landscaping is not currently proposed in Lake River or on the bank below ordinary high water. Native tree and shrub plantings in the riparian habitat above ordinary high water will span approximately 500 lineal feet, and the remainder will be planted with native grasses, as described in the January 17, 2014 Revised Lake River Riparian Enhancement Plan.

*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, <u>other</u>: various songbirds, raptors, and waterfowl are common in the area due to the proximity of the high-quality habitat in the Ridgefield National Wildlife Refuge

mammals: <u>deer</u>, bear, elk, beaver, <u>other</u>: mink, river otter, opossum, coyote, and raccoons

fish: <u>bass, salmon, trout</u>, herring, shellfish, <u>other</u>: carp

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

Species federally listed as threatened or endangered that may occur in or near the project area include Columbian white-tailed deer, steelhead (rainbow trout), chinook salmon, coho salmon, chum salmon, sockeye salmon, and Pacific smelt (Eulachon). Federally designated Pacific salmon and eulachon critical habitat is identified for Lake River and/or the nearby Columbia River mainstem.

c. Is the site part of a migration route? If so, explain.

The LRIS is in the generally defined Pacific Flyway for migrating birds, a broad migratory corridor that extends from Alaska to Baja California. The property is also in close proximity to the Ridgefield National Wildlife Refuge.

d. Proposed measures to preserve or enhance wildlife, if any:

The currently proposed remedial action has been designed to reduce adverse impacts to environmental health through exposure to toxic substances currently in the Lake River project area.

*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.

Not applicable to the current project.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

This project will not affect the potential use of solar energy by adjacent properties.

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:

Not applicable to the current project.

*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.

The remedial action has been selected to limit potential exposure to chemicals. Sediments to be dredged contain elevated levels of dioxins. To protect workers, work will be conducted in compliance with a health and safety plan (HASP) consistent with Washington Industrial Safety and Health Act. The project also involves typical risks, such as vehicle leaks, from operation of construction equipment. To control these risks, the contractor will abide by a spill prevention, control and countermeasure plan (SPCC).

1) Describe special emergency services that might be required.

No special emergency services are anticipated.

2) Proposed measures to reduce or control environmental health hazards, if any:

Implementation of the HASP and SPCC will minimize potential environmental health hazards. Contractors will have appropriate health and safety training and personal protective equipment.

b. ***Noise***

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There are no existing noises in the area that are anticipated to affect the current project.

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 proposed action will generate short-term noise from construction equipment, truck and boat traffic. The normal hours of operation on the site are expected to be from 7:00am to 10:00pm; these hours are consistent with the City of Ridgefield Municipal code.

3) Proposed measures to reduce or control noise impacts, if any:

Remedial action activities will be carried out in a manner consistent with the City of Ridgefield Municipal Code.

8. ***Land and shoreline use***

a. What is the current use of the site and adjacent properties?

The LRIS property is currently vacant except for the Port's administrative, maintenance, and operations offices. A public boat launch ramp, parking area, and restrooms are located at the south end of the property. Existing uses adjacent to the LRIS property include the Ridgefield National Wildlife Refuge to the north, railroad tracks and single-family residences to the east, and a houseboat marina to the south. The City's waste water treatment plant operates to the north and east of the site.

Lake River is used by recreationists (i.e., personal watercraft, water skiing, kayaking, swimming, and other beach activities) and fishers (by boat or from nearby piers). Lake River provides habitat for water-dependent ecological receptors, including aquatic plants, benthic invertebrates, fish, piscivorous mammals, and piscivorous raptors.

b. Has the site been used for agriculture? If so, describe.

The site has not been used for agriculture.

c. Describe any structures on the site.

Infrastructure remnants of historical LRIS river operations located in the Lake River project area include some degraded dolphins, degraded pilings, and a possible submerged bulkhead and other debris. Until recently, a public access dock at the end of Division St. was used by recreationists (e.g., kayaking access) when open. A small dock with a pumphouse structure exists at the north end of the site.

d. Will any structures be demolished? If so, what?

All existing in-water structures except for the small pumphouse dock will be demolished as part of the proposal project.

e. What is the current zoning classification of the site?

The site is currently zoned Waterfront Mixed Use.

f. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation is Mixed Use.

g. If applicable, what is the current shoreline master program designation of the site?

The current shoreline master program designation is High Intensity.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The site is located entirely within the Lake River Floodway Fringe, as identified on the Ridgefield Sensitive Lands Map. The site is also located within a Riparian Priority Habitat and Species Area.

i. Approximately how many people would reside or work in the completed project?

None

j. Approximately how many people would the completed project displace?

None

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

None

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

The proposed in-water remedy will not preclude development of the upland portions of the LRIS.

9. ***Housing***

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

None

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

None

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

None

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?

Not applicable.

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

Not applicable.

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

None

11. ***Light and glare***

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

None

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

No

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

None

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

Not applicable

12. ***Recreation***

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

Boating, fishing, nature watching

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

The immediate work area in the river will be temporarily inaccessible. Boats will be able to pass on the west side of the channel.

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 action will facilitate and improve recreation activities in the area by removing contaminants from the environment.

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.

One precontact archaeological site has been identified in the immediate vicinity of the project. Site 45CL4 is on the east bank of the river, partially within the LRIS.

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

As noted above, site 45CL4 is within the vicinity of the site.

In December 2012, precontact artifacts were encountered in a sediment core in Lake River. The artifacts consisted of four pieces of fire-cracked rock and one lithic tool fragment.

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

Based on review of Archeological Data on the Stratigraphic Context of Archaeological Deposits in Lake River prepared June 25, 2013 the LRIS remedial action will occur within the framework of a Monitoring and Inadvertent Discovery Plan (IDP). A draft plan was submitted to the COE March 17, 2014 and may be further developed through the involvement of the appropriate Tribes and agencies.

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.

The LRIS site is served by Division Street, which is a City of Ridgefield right-of-way. The area impacted by the current proposal is not adjacent to a public street.

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

The site is not served by public transit. The C-Tran Ridgefield Express bus runs between the Ridgefield Park & Ride located at NW 269th Street and NW 11th Avenue and the Salmon Creek Park and Ride at NE 134th Avenue and the I-5 freeway.

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

The proposed project would not require any new parking spaces or eliminate existing parking spaces.

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).

The proposed project would not require any new roads. There will be temporary construction access to the sediment handling area.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project may barge dredge spoils up the Columbia River for disposal. Sand and gravel may be barged to the site. Otherwise, rail, or air transportation will not be used.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The completed project will not generate any vehicular trips.

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

The project will not create any permanent transportation impacts.

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.

The proposed project will not create an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Since there are no anticipated impacts, there are no proposed reduction or control measures.

16. ***Utilities***

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Most utilities are available at the LRIS, however the area subject to the current project proposal does not have any utilities available.

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.*

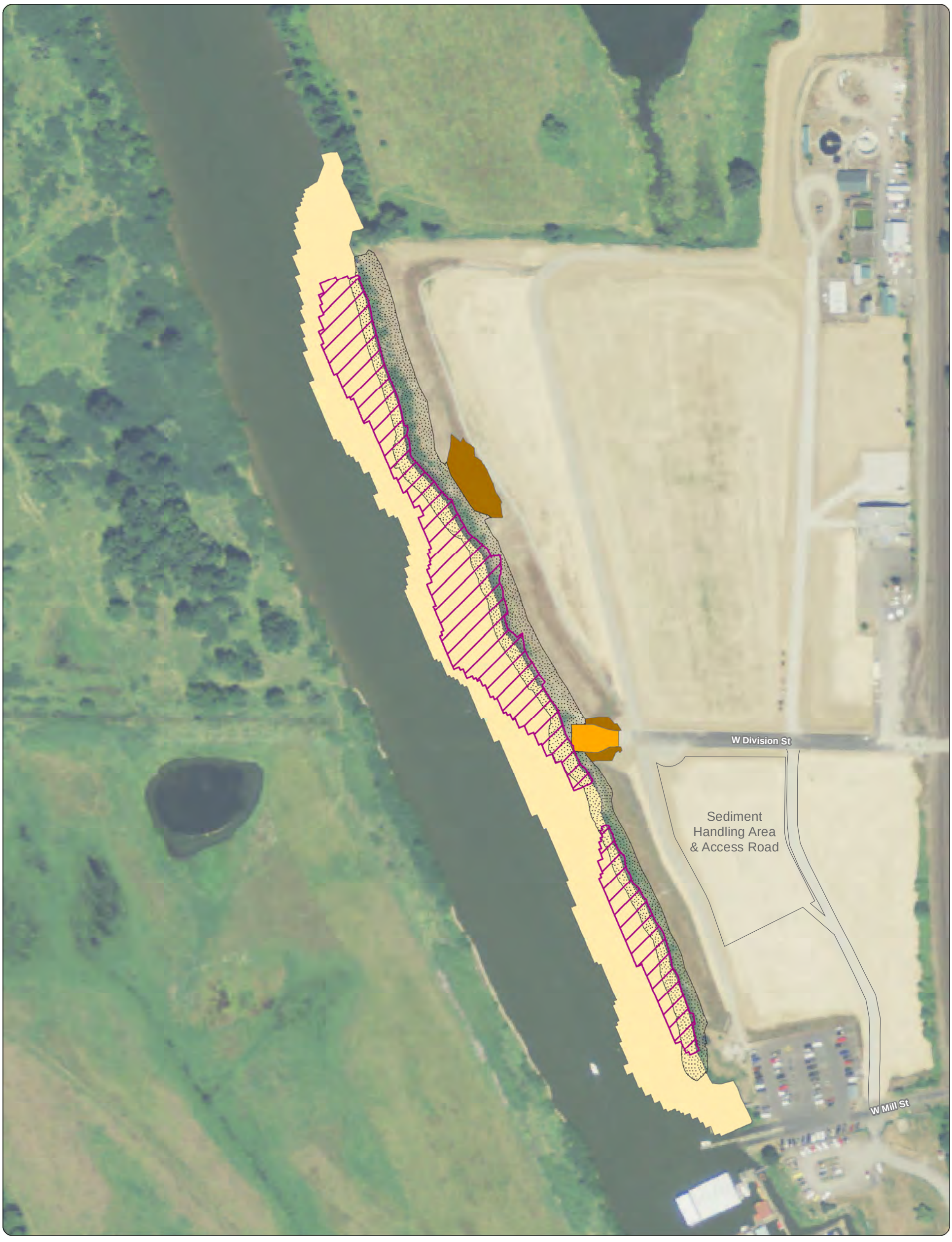
No utilities are needed or proposed for the project.

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:

Date Submitted:
4-8-14



Source: Aerial photograph (2013) obtained from the National Agriculture Imagery Program (NAIP); taxlot and road data obtained from Clark County (August 2013).

Note: ENR = enhanced natural recovery

Legend

- Dredge Prism
- Fish Mix
- Clean Soil
- Gravel
- ENR Sand

Figure
Lake River Remedy Areas

Lake River Remedial Action
Port of Ridgefield
Ridgefield, Washington

0 100 200
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

ATTACHMENT

Department of Ecology
SEPA DETERMINATION FOR LAKE RIVER REMEDIAL ACTION
PACIFIC WOOD TREATING SITE

SUBSTANTIVE REQUIREMENTS OF LOCAL AND STATE PERMITS
City of Ridgefield permits
Washington Department of Fish and Wildlife Hydraulic Project Approval

Lake River – City of Ridgefield Substantive Compliance Review

City of Ridgefield
Shoreline Master Program (SMP)

CHAPTER 2
APPLICABILITY, SHORELINE PERMITS AND EXEMPTIONS

2.1 Applicability

1. **This Program shall apply to all of the shorelands and waters within the City limits that fall under the jurisdiction of RCW 90.58 as follows:**

   a. **Such shorelands shall include those lands extending two hundred (200) feet in all directions as measured on a horizontal plane from the ordinary high water mark (OHWM); floodways and contiguous floodplain areas landward two hundred (200) feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters that are subject to the provisions of this Program, as may be amended; the same to be designated as to location by Ecology, as defined by RCW 90.58.**

   b. **In addition to lands identified in Section 2.1(1)(a), shorelands shall include land necessary for buffers for critical areas that occur within shorelines of the state.**

   c. **Such waters include:**

      i. **Lake River within the city limits of Ridgefield to the center of the river north of the southern boundary of Parcel #67441000 and extending the full width of the river south of that line;**

Response: The Applicant understands that the current project includes shorelands and waters that are identified within the City's Shoreline Management Plan, specifically in and along Lake River. The City's shoreline jurisdiction covers the entire project area, therefore the proposal is subject to review of the relevant policies standards and standards of this plan.

2. **Maps indicating the extent of shoreline jurisdiction and shoreline designations are guidance only. They are to be used in conjunction with best available science, field investigations and on-site surveys to accurately establish the location and extent of shoreline jurisdiction when a project is proposed. All areas meeting the definition of a shoreline of the state or a shoreline of statewide significance, whether mapped or not are subject to the provisions of this Program.**

3. **This Program shall apply to every person, individual, firm, partnership, association, organization, corporation, local or state governmental agency, public or municipal corporation, or other non-federal entity that develops, owns, leases, or administers lands, wetlands, or waters that fall under the jurisdiction of the Act; and within the external boundaries of federally owned lands (including but not limited to, private in-holdings in national wildlife refuges).**

4. **Non-federal agency actions undertaken on federal lands must comply with this Program and the Act.**

5. **Shoreline development occurring in or over navigable waters may require a shoreline permit in addition to other approvals required from state and federal agencies.**

6. **This Program shall apply whether the proposed development or activity is exempt from a shoreline permit or not.**

Response: The Applicant understands that the current project must comply with the City's Shoreline Management Program. Pursuant to RCW 70.105D.090, the proposed action is subject to state and federal permit requirements and therefore must comply with the substantive requirements of the underlying local agency permit requirements, but is exempt from the procedural requirements of those permits.

2.2 Shoreline Substantial Development Permit Required

1. **Substantial development as defined by this program and RCW 90.58.030 shall not be undertaken by any person on the shorelines of the state without first obtaining a Shoreline Substantial Development Permit from the Shoreline Administrator, unless the use or development is specifically identified as exempt from a Shoreline Substantial Development Permit, in which case a Statement of Exemption is required.**

2. **The Shoreline Administrator may grant a Shoreline Substantial Development Permit only when the development proposed is consistent with the policies and procedures of RCW 90.58, the provisions of WAC 173-27, and this Program.**

Response: As indicated below, substantial compliance is met, pursuant to RCW 70.105D.090. The project is otherwise exempt from full approval of a permit.

CHAPTER 3
SHORELINE MASTER PROGRAM GOALS AND POLICIES

3.7 Public Access and Recreation

3.7.2 Policies

1. **Provide, protect, and enhance a public access system that is both physical and visual; utilizes both private and public lands; increases the amount and**

diversity of public access to the State's shorelines and adjacent areas; and is consistent with the shoreline character and functions, private rights, and public safety.

2. **Increase and diversify recreational opportunities by promoting the continued public acquisition of appropriate shoreline areas for public use, and develop recreation facilities so that they are distributed throughout the community to foster convenient access.**

3. **Locate public access and recreational facilities in a manner that encourages variety, accessibility, and connectivity in a manner that will preserve the natural characteristics and functions of the shoreline.**

4. **Encourage public access provisions consistent with adopted City and County trails plans.**

5. **Encourage public access as part of each development project by a public entity, and for all private development (except residential development of less than four parcels), unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.**

6. **Discourage shoreline uses that curtail or reduce public access unless such restriction is in the interest of the environment, public health, and safety, or is necessary to a proposed beneficial use.**

7. **Consider private rights, public safety, and protection of shoreline ecological functions and processes when providing public access and recreational opportunities.**

Response: The Applicant proposes a remedial action required by the Washington State Department of Ecology (Ecology) in a Consent Decree (13-2-03830-1) for protection of human health and the environment, as required by Ecology for protection of human health and the environment. The proposed action does not include development. Public access to the shoreline area has recently been increased by the Applicant's completion of a public-access, multi-purpose trail area within the shorelines area. The Applicant has also recently completed a gravel trail that more closely follows the top of the bank. Both of these trails are open to the public except during construction. The Applicant has designed the landscaping plan for the proposed work to retain existing view corridors to Lake River and the neighboring Ridgefield National Wildlife Refuge (RNWR). The proposed vegetation and fish mix rounded rock bank stabilization has been designed to allow public access to the water and within the shoreline area. The proposed action meets the policies.

3.8 Restoration

3.8.2 Policies

1. **Shorelines that are biologically degraded should be reclaimed and restored to the greatest extent feasible. Implementation of restoration projects identified in the Shoreline Restoration Plan that are focused on restoring degraded habitat in shoreline jurisdiction take precedence over other restoration**

projects. Implementation of restoration projects on shorelines of statewide significance take precedence over implementation of restoration projects on other shorelines of the state.

Response: The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment, placement of clean sand, bank stabilization, and re-vegetation with native plants; the remediation is required by the state. The proposed action meets the standard.

2. **Restoration strategies should be developed and implemented such that ecosystem processes are sustainable in the long-term.**

Response: The Applicant proposes to permanently remove contaminated sediment and to stabilize the shoreline, providing long-term ecosystem functioning improvement. The riparian area will be re-vegetated with native plants; plantings will be monitored and maintained for five years. The proposed action meets the standard.

3. **Restoration of shoreline ecological functions should be encouraged during redevelopment.**

Response: The Applicant proposes a remedial action for protection of human health and the environment, as required by Ecology. The proposed work does not include redevelopment. The standard is not applicable to the project standard.

4. **Restoration efforts should include retrofitting existing stormwater control facilities to improve water quality.**

Response: The Applicant proposes a remedial action for protection of human health and the environment, as required by Ecology. No new impervious surfaces are proposed. The standard does not apply.

5. **Restoration efforts should consider a focus on floodplain and channel migration zone reconnection where rivers are confined by levees.**

Response: The Applicant proposes to conduct a state-required remedial action in a river. The standard does not apply.

6. **Restoration projects should have adaptive management techniques including adjusting the project design, correcting problems (barriers to success), and implementing contingency measures.**

Response: Although the project is a remedial action required by Ecology, not a restoration project, the Applicant has included contingency measures, best-management practices, and adaptive management techniques in engineering and planting plans. The proposed action meets the standard.

7. **Eradication of invasive species, including noxious weeds and non-native species, should be undertaken as needed.**

Response: The Applicant proposes to remove noxious weeds and non-native species prior to planting native vegetation. A monitoring and maintenance plan has been developed to ensure continued non-native species suppression. The proposed action meets the standard.

8. **Planting of vegetation that enhances shoreline ecological function should be encouraged.**

Response: The Applicant proposes to plant native vegetation suited to shoreline/riparian habitat to maximize ecological function enhancement (e.g., reduce shoreline erosion), including approximately 50 trees. Note deep-rooting trees are not allowed, as indicated in the Consent Decree such that the 2 to 3 foot clean soil environmental cap installed to contain contaminated soil above +11 NGVD is not penetrated by roots. The proposed action meets the standard.

9. **Education programs should be developed for:**

   a. **Property owners about proper vegetation/landscape maintenance and the impacts of shore armoring and over-water structures; and**

   b. **Boaters about proper waste disposal methods, anchoring techniques, best boating practices, and the State's invasive species inspection program pursuant to RCW 77.15.290.**

Response: The Applicant has coordinated the remedial design and associated maintenance and monitoring measures with the overseeing agency (Ecology). Vegetation will be maintained by the Applicant. Buoys will indicate no-wake zones during remedial construction and informational materials about the remedial action will be distributed to nearby residents and made available at public access points such as McCuddy's Marina upstream of the project area. The proposed action meets the standard.

10. **Cooperative restoration actions involving local, state, and federal agencies, Native American tribes, non-government organizations, and landowners should be encouraged.**

Response: The Applicant has coordinated the remedial action design with multiple local, state, and federal agencies via the US Army Corps of Engineers (COE) and Washington Department of Natural Resources Joint Aquatic Resources Permit Application (JARPA) process. Native American tribes have been consulted throughout project development and are being consulted through the Section 106 process. Informational materials will be provided to nearby landowners. The proposed action meets the standard.

3.9 Shoreline Modification and Stabilization

3.9.2 Policies

1. **New developments should be located in such a manner as to not require shoreline stabilization measures.**

Response: The Applicant proposes a remedial action for protection of human health and the environment, as required by Ecology. No new development is proposed. The standard does not apply.

2. **When necessary, natural, non-structural shoreline stabilization measures are preferred over structural stabilization measures. Alternatives for shoreline stabilization should be based on the following hierarchy of preference:**

   a. **No action;**

   b. **Flexible stabilization works constructed of natural materials, including soft shore protection, bioengineering, beach nourishment, protective berms, or vegetative stabilization;**

   c. **Rigid works constructed of structural materials such as riprap or concrete.**

Response: The proposed shoreline stabilization measures are part of a remedial action pursuant to a consent decree for protection of human health and the environment; the proposed shoreline stabilization measures will contain potentially contaminated soil in the river bank and maintain the integrity of the existing clean soil cap above OHWM. Action is required by Ecology. The applicant proposes shoreline stabilization measures consisting of flexible stabilization works constructed of natural materials including vegetated turf reinforcement mat and rounded rock fish mix. The proposed action meets the standard.

3. **Allow new or expanded structural shore stabilization, including bulkheads, only where it is demonstrated to be necessary to protect an existing primary structure that is in danger of loss or substantial damage, and where such structures and structural stabilization would not cause a net loss of shoreline ecological functions and processes.**

Response: No new or expanded structural shore stabilization is proposed. The standard does not apply.

4. **Shoreline stabilization should be located and designed to accommodate the physical character and hydraulic energy potential of a specific shoreline reach, which may differ substantially from adjacent reaches.**

Response: The proposed shoreline stabilization has been designed in accordance with the Corps of Engineers Coastal Engineering Manual to accommodate the physical character and hydraulic energy potential of the shoreline reach. The proposed action meets the standard.

5. **Provisions for multiple use, restoration, and/or public shore access should be incorporated into the location, design and maintenance of shore stabilization for public or quasi-public developments whenever safely compatible with the primary purpose. Shoreline stabilization on publicly owned shorelines should not be allowed to decrease long-term public use of the shoreline.**

Response: The Applicant proposes a remedial action for protection of human health and the environment, as required by Ecology. The proposed action does not include development. Public access to the shoreline area has recently been increased by the Applicant's completion of a public-access, multi-purpose trail area within the shorelines area. The Applicant has also recently completed a gravel trail that more closely follows the top of the bank. Both of these trails will be reopened to the public when construction is complete. The proposed vegetation and fish mix

rounded rock has been designed to allow public access to the water and within the shoreline area. The proposed action meets the standard.

6. **Shoreline stabilization projects should be developed in a coordinated manner among affected property owners and public agencies within a reach where feasible, particularly those that cross jurisdictional boundaries, to address ecological and geo-hydraulic processes and sediment conveyance.**

Response: The Applicant is the only property owner along the reach. The Applicant has coordinated the remedial action design with multiple local, state, and federal agencies via the JARPA permitting process. The proposed action meets the standard.

7. **Failing, harmful, unnecessary, or ineffective shoreline stabilization structures should be removed or replaced to restore shoreline ecological functions and processes.**

Response: The remnants of all existing structures will be removed in the project area. The proposed shoreline stabilization measures are flexible stabilization works constructed of natural materials – including rounded fish mix rock and vegetative stabilization. The proposed action is designed to enhance shoreline ecological functions and processes. The proposed action meets the standard.

8. **Larger works such as jetties, breakwaters, weirs, or groin systems should be permitted only for water-dependent uses and where mitigated to provide no net loss of shoreline ecological functions and processes.**

Response: No larger works are proposed. The standard does not apply.

9. **Lower impact structures, including floating, portable or submerged breakwater structures, or several smaller discontinuous structures, are preferred over higher impact structures.**

Response: No structures are proposed. The standard does not apply.

10. **Encourage and facilitate levee setback (including but not limited to, pulling back an existing levee to allow for a larger floodplain area contiguous to a water body), levee removal, and other shoreline enhancement projects.**

Response: There are no existing levees in the project area. The proposed action meets the standard.

11. **Materials used for construction of shoreline stabilization should be selected for durability, ease of maintenance, and compatibility with local shoreline features.**

Response: The proposed shoreline stabilization measures were selected for durability, ease of maintenance, and compatibility with local shoreline features. The proposed shoreline stabilization measures include turf reinforcement mat with native vegetation and durable, fish mix rounded rock. The proposed action meets the standard.

12. **Development and shoreline modifications that would result in interference with the process of channel migration that may cause significant adverse impacts to property or public improvements and/or result in a net loss of shoreline ecological functions within the rivers and streams should be limited.**

Response: The proposed shoreline stabilization measures are part of a remedial action pursuant to a Consent Decree for protection of human health and the environment; the proposed shoreline stabilization measures are designed to contain potentially contaminated soil in the river bank and to maintain the integrity of the existing clean soil cap above OHWM. The proposed shoreline stabilization measures have been designed to restore shoreline ecological functions and processes.

3.13 Water Quality and Quantity

3.13.2 Policies

1. **Encourage the location, construction, operation, and maintenance of shoreline uses, developments, and activities to be focused on maintaining or improving the quality and quantity of surface and ground water over the long term.**

Response: The proposed action will not result in the location, construction, operation, or maintenance of new shoreline uses. Rather, the proposal is intended to remove contaminated materials and restore the shoreline to an improved state which will have positive impacts on the long term quality of surface water.

2. **Minimize, through effective education, site planning, and best management practices, the inadvertent release of chemicals, activities that cause erosion, stormwater runoff, and faulty on-site sewage systems that could contaminate or cause adverse effects on water quality.**

Response: The Applicant will implement best management practices to eliminate or reduce water quality impacts to the maximum extent practicable. Construction will be conducted with a closed dredge bucket to minimize water quality impacts. The proposed remedial action includes additional components designed to minimize erosion, runoff, and chemical release (i.e., placement of a clean sand layer in the sediment excavation area to minimize chemical residuals, slope stabilization and native plantings and turf reinforcement mat to minimize erosion and runoff). The project will comply with the substantive requirements of the Clean Water Act as implemented by Ecology. The proposed action meets the standard.

3. **Encourage the maintenance and restoration of appropriate vegetative buffers along surface waters to improve water temperature and reduce the adverse effects of erosion and runoff.**

Response: The Applicant proposes to plant native vegetation along the shoreline to reduce erosion and runoff. A plant monitoring and maintenance plan has been developed to maintain native vegetation and associated functions. The proposed action meets the standard.

CHAPTER 4
SHORELINE DESIGNATIONS

4.3.5 High Intensity Shoreline Designation

4.3.5.1 Purpose

The purpose of the "High Intensity" shoreline designation is to provide for high intensity water-oriented commercial, transportation, and industrial uses while protecting existing shoreline ecological functions and restoring ecological functions in areas that have been previously degraded.

4.3.5.2 Designation Criteria

The following criteria are used to consider a High Intensity shoreline designation:

1. **The shoreline is located within incorporated municipalities and designated urban growth areas;**
2. **The shoreline has low to moderate ecological function with low to moderate opportunity for ecological restoration or preservation;**
3. **The shoreline contains mostly industrial, commercial, port facility, mixed-use, or multi-family residential development at high urban densities and may contain industries that are not designated agriculture, forestry, or mineral resource lands in the comprehensive plan;**
4. **The shoreline may be or have been identified as part of a state or federal environmental remediation program;**
5. **The shoreline is planned or platted for high intensity uses in the comprehensive plan; or**
6. **The shoreline may support public passive or active water-oriented recreation where ecological functions can be restored.**

Response: The Applicant understands that the project is entirely within an area of the shorelands designated as High Intensity. The proposed remedial action is consistent with the criteria used to consider the designation.

4.3.5.3 Areas Designated

The High Intensity shoreline designation applies to areas as shown on a copy of the Official Shoreline Designation Map, City of Ridgefield, Washington (Section 4.4) and on a copy of the unofficial map in Appendix A.

Response: The Applicant recognizes that the project is located within an area designated as High Intensity on the official Shoreline Designation Map.

4.3.5.4 Management Policies

In addition to the other applicable policies and standards of this Program the following management policies shall apply:

1. **Encourage regulations that ensure no net loss of shoreline ecological functions as a result of new development.**
2. **Promote infill and redevelopment in developed shoreline areas and encourage environmental remediation and restoration of the shoreline, where applicable with the goal of achieving full utilization of designated high-intensity shorelines.**
3. **Encourage the transition of uses from non-water-oriented to water-oriented uses.**

4. **Water-oriented uses are encouraged, however new non-water oriented uses may be allowed if they do not adversely impact or displace water-oriented uses and when included in a master plan or part of a mixed-use development.**

Response: The proposed remedial action, intended to protect human health and the environment, will facilitate the application and promotion of the identified management policies. The proposal is consistent with this provision.

4.4 Official Shoreline Map

4.4.1 Map Established

1. **The location and extent of areas under the jurisdiction of this Program, and the boundaries of various shoreline designations affecting the lands and waters of the City shall be as shown on the map entitled, "Official Shoreline Designation Map, City of Ridgefield, Washington." All the notations, references, amendments, and other information shown on the "Official Shoreline Designation Map" are hereby made a part of this Program, as if such information set forth on the map were fully described herein.**

Response: The Applicant recognizes that the subject project is located within the jurisdiction of the Official Shoreline Designation Map and that the policies and standards associated with that map and program apply.

CHAPTER 5
GENERAL SHORELINE USE AND DEVELOPMENT REGULATIONS

All uses and development activities in shoreline jurisdiction shall be subject to the following general standards and those in Chapter 5A in addition to the applicable use-specific standards in Chapter 6.

5.1 General Shoreline Use and Development Regulations

1. **Shoreline uses and developments that are water-dependent shall be given priority.**

Response: The Applicant proposes a remedial action to protect human health and the environment in Lake River. The proposed action supports the shoreline uses of the river, including improvements to ecological habitat and public access to the shore.

2. **The applicant shall demonstrate all reasonable efforts have been taken to avoid and where unavoidable, minimize and mitigate impacts such that no net loss of critical area and shoreline ecological function is achieved. Mitigation shall occur in the following order of priority:**

    a. **Avoiding the impact altogether by not taking a certain action or parts of an action. This may necessitate a redesign of the proposal.**

    b. **Minimizing unavoidable impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology**

or by taking affirmative steps to avoid or reduce impacts. The applicant shall seek to minimize fragmentation of the resource to the greatest extent possible.

c. **Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;**

d. **Reducing or eliminating the impact over time by preservation and maintenance operations;**

e. **Compensating for the impact by replacing, enhancing, or providing substitute resources or environments. The compensatory mitigation shall be designed to achieve the functions as soon as practicable.**

f. **Monitoring the impact and the compensation projects and taking appropriate corrective measures.**

Response: The Applicant has incorporated mitigation sequencing (avoiding, minimizing, and mitigating impacts) throughout the project design, which has been overseen by Ecology and coordinated with the COE. Existing native vegetation will be replaced according to a 2:1 lineal foot ratio determined by COE. The proposed action meets the standards.

Avoidance approaches include:

- Through extensive sediment data collection and analysis, the extent of sediment remediation has been clearly defined, so the work effort will focus on impacted areas and avoid impacts to surrounding habitat.
- The remedial action will remove contaminated sediments that currently pose a risk to the environment, so the cleanup avoids continued exposure of fish and wildlife to toxics.
- The currently erosive bank will be stabilized to eliminate soil and associated contamination from entering the aquatic environment.

Minimization measures include the following:

- Best management practices will be implemented to minimize potential short-term impacts from turbidity and noise associated with construction.
- To minimize resuspension and mobilization of contaminants, a precision dredging technique using a barge-mounted, fixed-arm excavator equipped with real-time kinematic global positioning system and a fully enclosed, double-arcing rehandling dredge bucket will be used to remove contaminated sediments.

The following measures will mitigate for construction impacts:

- Habitat in the riparian and aquatic zones will be improved relative to existing conditions through contaminant removal, debris removal in and along the river, and replacement of native vegetation according to a 2:1 lineal foot ratio.

- Maintenance and monitoring: a monitoring approach and adaptive management and maintenance techniques were developed to ensure plantings are effective.

3. **In addition to compensatory mitigation, unavoidable adverse impacts may be further addressed through voluntary restoration efforts.**

Response: The standard is not applicable to the project.

4. **Shoreline uses and developments shall not cause impacts that require remedial action or loss of shoreline ecological functions on other properties.**

Response: The Applicant proposes a remedial action designed specifically to increase ecological functions. The proposed action meets the standard.

5. **Shoreline uses and developments shall be located and designed in a manner such that shoreline stabilization is not necessary at the time of development and will not be necessary in the future for the subject property or other nearby shoreline properties unless it can be demonstrated that stabilization is the only alternative that allows a reasonable and appropriate water-dependent use to become established or expand or protects public safety and existing primary structures.**

Response: The proposed shoreline stabilization measures are part of a remedial action pursuant to a consent decree to protect human health and the environment; the proposed shoreline stabilization measures are designed to contain potentially contaminated soil in the river bank and to maintain the integrity of the existing environmental cap above OHWM. The proposed shoreline stabilization measures have been designed to restore shoreline ecological functions and processes. The proposed action meets the standard.

6. **Land shall not be cleared, graded, filled, excavated or otherwise altered prior to issuance of the necessary permits and approvals including a Shoreline Statement of Exemption for a proposed shoreline use or development to determine if environmental impacts have been avoided, minimized and mitigated to result in no net loss of ecological functions.**

Response: The Applicant is pursuing approval through the JARPA which includes applications for federal, state and local permits. Pursuant to RCW 70.105D.090, remedial actions conducted under a consent decree are exempt from the procedural requirements of applicable state and all local permits. However, Ecology shall ensure compliance with the substantive provisions of these permits. The Applicant has provided these narrative responses to demonstrate compliance with the substantive provisions identified by the City.

7. **Non-water-oriented uses shall not adversely impact or displace water-oriented shoreline uses.**

Response: No non-water-oriented uses are currently proposed. The standard is not applicable.

8. **Single family residential uses shall be allowed on all shorelands not subject to a preference for commercial or industrial water-dependent uses, and shall be**

located, designed and used in accordance with applicable policies and standards of this Program. However, single family residences are prohibited in the Natural shoreline designation, and new floating homes are prohibited in the Aquatic shoreline designation.

Response: Single family residential uses are not proposed. The standard is not applicable.

9. **On navigable waters or their beds, all uses and developments should be located and designed to:**

   a. **Minimize interference with surface navigation;**

   b. **Consider impacts to public views; and**

   c. **Allow for the safe, unobstructed passage of fish and wildlife, particularly species dependent on migration.**

Response: The proposed remedial action will not interfere with surface navigation, will improve public views through the intentional location of required tree plantings, and will improve habitat for fish and wildlife through the removal of toxic materials and placement of native plant species. The standard has been satisfied.

10. **Hazardous materials shall be disposed of and other steps be taken to protect the ecological integrity of the shoreline area in accordance with the other policies and regulations of this Program as amended and all other applicable federal, state, and local statutes, codes, and ordinances. Environmental remediation actions pursuant to a consent decree, order, or agreed order issued under RCW 70.105(D) are exempt from the requirement to obtain an SSDP, SCUP, or SVAR under this Program but must comply with the substantive requirements of the Act and this Program. Any development or redevelopment on a remediated site must occur consistent with any covenants running with the land, the Act and this Program. (See Sections 1.7(6), 2.3.2(19), and 6.1(3).)**

Response: The proposed action will not include the generation, handling, or disposal of hazardous materials. The remedial design is intended to protect the ecological integrity of the shoreline area. The proposed work is pursuant to a consent decree; the proposed work will comply with the substantive requirements of the Act and this Program. The proposed action meets the standard.

11. **In-water work shall be scheduled to protect biological productivity (including but not limited to fish runs, spawning, and benthic productivity). In-water work shall not occur in areas used for commercial fishing during a fishing season unless specifically addressed and mitigated for in the permit.**

Response: The Applicant proposes to conduct work during an in-water work window designated by the Washington Department of Fish and Wildlife (WDFW) and COE to protect biological productivity. The project area is not a commercial fishing area. The proposed action meets the standard.

12. **The effect of proposed in-stream structures on bank margin habitat, channel migration, and floodplain processes should be evaluated during permit review.**

Response: The Applicant does not propose to construct in-stream structures. The proposed action meets the standard.

13. **Previous approvals of master plans for projects in shoreline jurisdiction should be accepted. New phases of projects for which no master plan has yet been approved, or for which major changes are being proposed, or new projects for which master plans are being submitted shall be subject to the policies and regulations of this Program.**

Response: The Applicant understands the standard.

14. **Within urban growth areas (RCW 36.70A.110), the Department of Ecology may grant relief from use and development regulations of this program when:**

    a. **A shoreline restoration project causes or would cause a landward shift in the OHWM creating a hardship meeting specific criteria in RCW 90.58.580;**

    b. **The proposed relief meets specific criteria in RCW 90.58.580; and**

    c. **The application for relief is submitted to Ecology in writing requesting approval or disapproval as part of a normal review of a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, or Shoreline Variance. If the proposal is not connected to a shoreline permit review, the City may provide a copy of a complete application to Ecology along with the applicant's request for relief.**

Response: The Applicant does not request relief from use and development regulations of the SMP program.

5.3 Critical Areas Protection

5.3.1 General Provisions

1. **In addition to the provisions of this section, critical areas (fish and wildlife habitat conservation areas, frequently flooded areas, geologic hazard areas, critical aquifer recharge areas, and wetlands) located within shoreline jurisdiction and their buffers are regulated and protected by Chapter 5A, RMC 18.280, Critical Areas Protection and RMC 18.750, Flood Control as modified for consistency with the Act and this Program.**

2. **Unless otherwise stated, no development shall be constructed, located, extended, modified, converted, or altered or land divided without full compliance with this Program whether or not a shoreline permit or written Shoreline Statement of Exemption is required.**

3. **Any allowed use, development, or activity affecting a critical area proposed on a parcel located in the shoreline jurisdiction, whether or not exempt from obtaining a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, or Shoreline Variance, shall be regulated under the provisions of this Program.**

4. **Shoreline uses and developments and their associated structures and equipment shall be located, designed and operated using best management practices to protect critical areas.**

Response: The Applicant understands these standards.

5.4 Public Access

1. **Provisions for adequate public access shall be incorporated into all shoreline development proposals that involve public funding unless the applicant demonstrates public access is not feasible due to one or more of the provisions of Section 5.4.2 (a-e). Where feasible, such projects shall incorporate ecological restoration.**

Response: The shoreline area is currently open to public access. The Applicant has provided multi-use trails open to the public within the shoreline area; these trails will be reopened following construction. The Applicant does not propose any development or use which will decrease public access to the shoreline area. The proposed action meets the standard.

2. **Consistent with constitutional limitations, provisions for adequate public access shall be incorporated into all land divisions and other shoreline development proposals (except residential development of less than five (5) parcels), unless this requirement is clearly inappropriate to the total proposal. Public access will not be required where the applicant demonstrates one or more of the following:**

   a. **Unavoidable health or safety hazards to the public exist that cannot be prevented by any practical means;**

   b. **Inherent security requirements of the use cannot be satisfied through the application of alternative design features or other solutions;**

   c. **The cost of providing the access, easement, alternative amenity, or mitigating the impacts of public access are unreasonably disproportionate to the total proposed development;**

   d. **Significant environmental impacts that cannot be mitigated will result from the public access; or**

   e. **Significant undue and unavoidable conflict between public access requirements and the proposed use and/or adjacent uses would occur, provided that the applicant has first demonstrated and the City determines that all reasonable alternatives have been evaluated and found infeasible, including but not limited to:**

i. **Regulating access by such means as maintaining a gate and/or limiting hours of use;**

ii. **Designing separation of uses and activities (including but not limited to, fences, terracing, use of one-way glazings, hedges, landscaping); and**

iii. **Provisions for access at a site geographically separated from the proposal such as a street end, vista or trail system.**

Response: The shoreline area is currently open to public access. The Applicant has provided multi-use trails open to the public within the shoreline area; these trails will be reopened following construction. The Applicant does not propose any development or use which will decrease public access to the shoreline area. No land division is proposed. The proposed action meets the standard.

3. **Public access sites shall be connected to barrier free route of travel and shall include facilities based on criteria within the within the Americans with Disabilities Act Accessibility guidelines.**

Response: No new public access sites are proposed. The existing multi-use trail was designed in accordance with the Americans with Disabilities Act Accessibility guidelines. The proposed action meets the standard.

4. **Public access shall include provisions for protecting adjacent properties from trespass and other possible adverse impacts to neighboring properties.**

Response: Adjacent properties are already protected from trespass and other adverse impacts by fencing. No new public access or change to existing fencing is proposed. The proposed action meets the standard.

5. **Signs indicating the public's right of access to shoreline areas shall be installed and maintained in conspicuous locations.**

Response: The Applicant will place signage in accordance with the standard at the completion of construction.

6. **Required public access shall be fully developed and available for public use at the time of occupancy of the use or activity.**

Response: Existing public access will be reopened when construction is complete. No new public access is proposed. The proposed action meets the standard.

7. **Public access shall consist of a dedication of land or a physical improvement in the form of a walkway, trail, bikeway, corridor, viewpoint, park, deck, observation tower, pier, boat launching ramp, dock or pier area, or other area serving as a means of view and/or physical approach to public waters and may include interpretive centers and displays.**

Response: Existing public access consists of a multi-use trail within the shoreline area. No new public access is proposed. The proposed action meets the standard.

8. **Public access easements and permit conditions shall be recorded on the deed of title and/or on the face of a plat or short plat as a condition running**

contemporaneous with the authorized land use, as a minimum. Said recording with the County Auditor's Office shall occur at the time of permit approval.

Response: The Applicant will comply with the applicable requirements for recording easements and conditions at the time of proposed permits for public access improvements. This will occur at a future date.

9. **Future actions by the applicant, successors in interest, or other parties shall not diminish the usefulness or value of the public access provided.**

Response: The Applicant understands this standard.

10. **Maintenance of the public access facility shall be the responsibility of the owner unless otherwise accepted by a public or non-profit agency through a formal agreement approved by the Shoreline Administrator and recorded with the County Auditor's Office.**

Response: The Applicant will continue to maintain the multi-use trail.

5.5 Restoration

1. **Restoration of shoreline ecological functions and processes shall be encouraged and allowed on all shorelines and shall be located, designed and implemented in accordance with applicable policies and regulations of this Program and consistent with other City programs (see Section 6.4.4). Implementation of restoration projects on shorelines of statewide significance take precedence over implementation of restoration projects on other shorelines of the state.**

Response: The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment and clean sand placement, bank stabilization, and re-vegetation; the remediation is required by the Ecology. The proposed action will be implemented consistent with applicable policies and standards of this Program and consistent with other City programs. The proposed action meets the standard.

2. **Impacts to shoreline ecological functions shall be fully mitigated. Such mitigation may include elements from the Shoreline Restoration Plan, where appropriate.**

Response: The Applicant has incorporated mitigation sequencing (avoiding, minimizing, and mitigating impacts) throughout the project design, which has been overseen by Ecology and coordinated with the COE. Existing native vegetation will be replaced according to a 2:1 lineal foot ratio determined by COE to mitigate for construction impacts. A monitoring approach and adaptive management and maintenance techniques were developed to ensure plantings are effective. In addition, habitat in the riparian and aquatic zones will be improved relative to existing conditions through contaminant removal and debris removal in and along the river. The proposed action meets the standards.

3. **Elements of the Shoreline Restoration Plan may also be implemented in any shoreline designation to improve shoreline ecological function.**

Response: The Applicant understands the standard.

4. **Implementation of restoration projects identified in the Shoreline Restoration Plan that are focused on restoring degraded habitat in shoreline jurisdiction take precedence over other restoration projects.**

Response: The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment and clean sand placement, bank stabilization, and re-vegetation; the remediation is required by the state. The proposed action meets the standard.

5. **Restoration efforts shall be developed by a qualified professional, shall be based on federal, state, and local guidance and shall consider the following:**

   a. **Riparian soil conditions;**

   b. **In-stream fish habitats; and**

   c. **Healthy aquatic and terrestrial food webs.**

Response: The Applicant has retained qualified professionals to design the remedial action. Consistent with federal, state, and local guidance, a riparian habitat evaluation identifying soil conditions and shoreline and in-stream habitat structure and fish habitats has been completed, including an evaluation of the habitat functions using the Clark County habitat conservation ordinance Riparian Habitat field rating form; fish data have been reviewed to identify species present; and food web modelling for fish and other aquatic-dependent receptors has been completed to guide remedy area selection. The proposed action meets the standard.

5.6.2 Clearing, Grading, Fill and Excavation

1. **Land disturbing activities such as clearing grading, fill and excavation shall be conducted in such a way as to minimize impacts to soils and native vegetation, and shall comply with RMC 18.755, Erosion Control; 13.30, Stormwater Utility; and RMC Chapter 14.03, Construction Administrative Code.**

Response: The proposed work is designed to minimize impacts to non-contaminated soils and native vegetation. The Applicant proposes to remove existing non-native vegetation and replant disturbed areas with native vegetation. The Applicant will comply with RMC 18.755, Erosion Control; 13.30, Stormwater Utility, and RMC Chapter 14.03, Construction Administrative Code as applicable. The proposed action meets the standard.

2. **Clearing, grading, fill, and excavation activities shall be scheduled to minimize adverse impacts, including but not limited to, damage to water quality and aquatic life.**

Response: The Applicant proposes to conduct work during an in-water work window designated by the WDFW and COE to protect biological productivity. The work will be conducted under the requirements of a water quality plan meeting the substantive requirements of the Clean Water Act Section 401 Water Quality Certification. This

water quality plan was developed by the Port of Ridgefield (Port) and approved by Ecology. The proposed action meets the standard.

3. **Clearing and grading shall not result in changes to surface water drainage patterns that adversely impact adjacent properties.**

Response: The proposed work will not result in changes to surface water drainage patterns. The proposed action meets the standard.

4. **Developments shall comply with the RMC 18.755, Erosion Control during construction and shall ensure preservation of native vegetation for bank stability. Disturbed areas shall be stabilized immediately and revegetated with native vegetation.**

Response: the Applicant will comply with RMC 18.755. Native vegetation will be preserved where possible. Disturbed areas will be stabilized immediately and revegetated with native vegetation. The proposed action meets the standard.

5. **Habitat that cannot be replaced or restored within twenty (20) years shall be preserved. Peat bogs and stands of mature trees are examples of such habitat.**

Response: No peat bogs or stands of mature trees are located within the proposed work area. The Applicant proposes to remove one isolated tree along the shoreline. The Applicant proposes to preserve all other trees. The work area will be re-vegetated with native species, including approximately 50 trees. The proposed action meets the standard.

6. **Fills shall be permitted only in conjunction with a permitted use, and shall be of the minimum size necessary to support that use. Speculative fills are prohibited.**

Response: The Applicant proposes a minimum volume of fill to complete the remedial action. No speculative fills are proposed. The proposed action meets the standard.

7. **Any fill activity shall comply with the fill provisions of RMC Chapter 14.03. Fill shall consist only of clean materials.**

Response: The Applicant proposes to excavate and dispose of contaminated sediments and place clean sand, rock, and soil fill. The proposed action meets the standard.

8. **Soil, gravel or other substrate transported to the site for fill shall be screened and documented that it is uncontaminated. Use of any contaminated materials as fill is prohibited unless done in conjunction with or as part of an environmental remediation project authorized under RCW 70.105D.**

Response: The Applicant will screen soil, gravel, or other substrate transported to the site for fill and will document that it is uncontaminated. No use of contaminated materials as fill is proposed. The proposed action meets the standard.

9. **Fills shall be designed and placed to allow surface water penetration into groundwater supplies where such conditions existed prior to filling unless contrary to the purposes of an environmental remediation project authorized under RCW 70.105D.**

Response: The proposed work will not impede surface water penetration into groundwater supplies. The proposed action meets the standard.

10. **Fills must protect shoreline ecological functions, including channel migration processes.**

Response: The proposed shoreline stabilization measures are part of a remedial action pursuant to a consent decree; the proposed shoreline stabilization measures are designed to contain potentially contaminated soil in the river bank and to maintain the integrity of the existing clean soil cap above OHWM. The proposed shoreline stabilization measures have been designed to restore shoreline ecological functions and processes.

11. **Fill waterward of OHWM shall only be allowed as a conditional use, and then only when it is necessary:**

    a. **To support a water-dependent or public access use;**

    b. **For habitat creation or restoration projects;**

    c. **For remediation of contaminated sediments as part of an interagency environmental clean-up plan;**

    d. **For disposal of dredged material considered suitable under, and conducted in accordance with the dredged material management program of the Washington Department of Natural Resources;**

    e. **For expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible;**

    f. **For a mitigation action;**

    g. **For environmental restoration; or**

    h. **For a beach nourishment or enhancement project.**

Response: The Applicant proposes to place clean fill for the remediation of contaminated sediments and soils under a consent decree with Ecology. The proposed action meets the standard.

12. **Excavation below the OHWM is considered dredging and subject to provisions under that section in Chapter 6.**

Response: The Applicant will comply with the applicable dredging provisions of section 6 as noted in that section.

13. **Upon completion of construction, remaining cleared areas shall be replanted with native species on the City's Native Plant List (RMC 18.830). Replanted areas shall be maintained such that within three (3) years' time the vegetation is fully re-established.**

Response: The Applicant has proposed a planting and monitoring plan for the remedial action. Plants suited to riparian habitat are selected. All plants selected are native species on

the City's Native Plant List (RMC 18.830). Replanted areas will be monitored and maintained for five years. The standard is met.

5.9 Water Quality and Quantity

1. **The location, design, construction, and management of all shoreline uses and activities shall protect the quality and quantity of surface and ground water adjacent to the site.**

Response: The proposed action will not affect the quality and quantity of surface and ground water adjacent to the site. No work is proposed that will impact the quality of groundwater. The proposed action meets the standard.

2. **All shoreline development shall comply with the applicable requirements of the RMC Chapter 18.755, Erosion Control and 13.30, Stormwater Utility.**

Response: The Applicant will comply with the applicable requirements of RMC Chapter 18.755, Erosion Control and 13.30, Stormwater Utility. The proposed action meets the standard.

3. **Best management practices (BMPs) for control of erosion and sedimentation shall be implemented for all shoreline development.**

Response: The Applicant proposes to conduct work during an in-water work window designated by the WDFW and COE to protect biological productivity. The work will be conducted under the requirements of a water quality plan meeting the substantive requirements of the Clean Water Act Section 401 Water Quality Certification. This water quality plan is developed by the Port and approved by Ecology. The proposed action includes the use of BMPs for control of erosion and sedimentation. The proposed action meets the standard.

4. **Potentially harmful materials, including but not limited to oil, chemicals, tires, or hazardous materials, shall not be allowed to enter any body of water or wetland, or to be discharged onto the land except in accordance with RMC 13.30, Stormwater Utility. Potentially harmful materials shall be maintained in safe and leak-proof containers.**

Response: The Applicant understands this standard; the proposed work will be conducted in accordance with applicable federal, state and local standards. The proposed action meets the standard.

5. **Herbicides, fungicides, fertilizers, and pesticides shall not be applied within twenty-five (25) feet of a waterbody, except by a qualified professional in accordance with state and federal laws. Further, pesticides subject to the final ruling in Washington Toxics Coalition, et al., v. EPA shall not be applied within sixty (60) feet for ground applications or within three hundred (300) feet for aerial applications of the subject water bodies and shall be applied by a qualified professional in accordance with state and federal law.**

Response: No pesticide or fungicide use is proposed. Any herbicides or fertilizers will be applied by a qualified professional in accordance with state and federal laws. The proposed action meets the standard.

6. **Any structure or feature in the Aquatic shoreline designation shall be constructed and/or maintained with materials that will not adversely affect water quality or aquatic plants or animals. Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants.**

Response: No structures or features are proposed.

7. **Septic systems should be located as far landward of the shoreline and floodway as possible. Where permitted, new on-site septic systems shall be located, designed, operated, and maintained to meet all applicable water quality, utility, and health standards.**

Response: No septic systems are proposed.

CHAPTER 5A
GENERAL SHORELINE USE AND DEVELOPMENT REGULATIONS CONTINUED: CRITICAL AREAS REGULATIONS

18.280.030 - Applicability and exemptions

A. Applicability.

Response: The Applicant understands that the critical area standards apply to the current application. Findings demonstrating substantive compliance with the applicable requirements are provided herein.

18.280.060 - Approval criteria

Any activity subject to this chapter, unless otherwise provided for in this chapter, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria. The city may condition the proposed activity as necessary to mitigate impacts to critical areas and their buffers and to conform to the standards required by this chapter. Activities shall protect the functions of the critical areas and buffers on the site.

A. **Avoid Impacts. The applicant shall first avoid all impacts that degrade the functions and values of (a) critical area(s) by not taking a certain action or parts of an action. This may necessitate a redesign of the proposal.**

Response: The Applicant has implemented mitigation sequencing (avoiding, minimizing, and mitigating impacts) throughout the project design. The proposed action meets the standard. Avoidance approaches include:

Avoidance approaches include:

- Through extensive sediment data collection and analysis, the extent of sediment remediation has been clearly defined, so the work effort will focus on impacted areas and avoid impacts to surrounding habitat.

- The remedial action will remove contaminated sediments that currently pose a risk to the environment, so the cleanup avoids continued exposure of fish and wildlife to toxics.
- The currently erosive bank will be stabilized to eliminate soil and associated contamination from entering the aquatic environment.

B. **Minimize Impacts. The applicant shall minimize the impact of the activity by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts. The applicant shall seek to minimize the fragmentation of the resource to the greatest extent possible.**

Response: The Applicant has implemented mitigation sequencing (avoiding, minimizing, and mitigating impacts) throughout the project design. The proposed action meets the standard. Minimization measures include the following:

- Minimization measures include the following:
- Best management practices will be implemented to minimize potential short-term impacts from turbidity and noise associated with construction.
- To minimize resuspension and mobilization of contaminants, a precision dredging technique using a barge-mounted, fixed-arm excavator equipped with real-time kinematic global positioning system and a fully-enclosed, double-arcing rehandling dredge bucket will be used to remove impacted sediments.
- Native vegetation will be preserved where possible.

C. **Rectify Impacts. The applicant shall rectify the impacts by repairing, rehabilitating, or restoring the affected environment.**

Response: The Applicant proposes a remedial action designed specifically to rehabilitate Lake River. The shoreline will be planted with native vegetation following clearing and bank stabilization activities. Plantings will be monitored and maintained for five years. The proposed action meets the standard.

D. **Reduce Impacts. The applicant shall reduce or eliminate the impacts over time by preservation and maintenance operations.**

Response: The Applicant proposes a remedial action that provides long-term environmental benefit. Short-term construction impacts will be reduced through use of best management practices, including spill prevention and pollution-, erosion-, and sediment-control measures and adherence to the water quality plan. The proposed action meets the standard.

E. **Compensatory Mitigation. The applicant shall compensate for the impacts by replacing, enhancing, or providing substitute resources or environments. The compensatory mitigation shall be designed to achieve the functions as soon as practicable.**

Response: Construction impacts to shoreline ecological functions will be mitigated by the following project components:

- Habitat in the riparian and aquatic zones will be improved relative to existing conditions through contaminant removal, debris removal in and along the river, and replacement of native vegetation according to a 2:1 lineal foot ratio.
- Maintenance and monitoring. A monitoring approach and adaptive management and maintenance techniques were developed to ensure plantings are effective. The proposed project meets the standard.

F. Monitor Impacts and Mitigation. The applicant shall monitor the impacts and the compensation projects and take appropriate corrective measures.

Response: The Applicant has developed a planting maintenance and monitoring plan. A monitoring approach and adaptive management and maintenance techniques were developed to ensure plantings successfully establish. Plantings will be maintained and monitored for five years. The proposed action meets the standard.

G. **Type and Location of Mitigation. Compensatory mitigation shall be in-kind and on-site when feasible, and sufficient to maintain the functions of the critical area consistent with the mitigation provisions of this ordinance, and to prevent risk from a hazard posed by a critical area to a development or by a development to a critical area. Wetland mitigation bank credits shall only be utilized when consistent with the provisions of this ordinance.**

Response: On-site mitigation will be conducted. Native vegetation and associated ecological functions will be improved relative to the existing condition. The proposed project meets the standard.

H. **In addition to mitigation, unavoidable adverse impacts may be addressed through restoration efforts.**

Response: The Applicant proposes a remedial action designed specifically to rehabilitate Lake River.

I. **No Net Loss. The proposal protects the critical area functions and values and results in no net loss of critical area functions and values.**

Response: The Applicant proposes a remedial action designed specifically to provide environmental benefit to Lake River. The remedial action required by Ecology addresses unacceptable risks to ecological receptors and includes dredging contaminated sediment, placing clean sand to contain residual contamination, stabilizing the shoreline bank, and re-vegetating the riparian area with native plants. Therefore, the project will results in a net increase in critical area functions and values. The proposed action meets the standard.

J. **Consistency with General Purposes. The proposal is consistent with the general purposes of this chapter and does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site;**

Response: The Applicant proposes a remedial action for protection of human health and the environment that is designed with oversight from Ecology and is consistent with the general purposes of this chapter. Public health, safety, or welfare will not be significantly affected. The proposed action meets the standard.

18.280.110 - Fish and wildlife habitat conservation areas.

A. Designation.

1. **There are established in the city the following identified fish and wildlife habitat conservation areas:**

   a. **Habitat for any life stage of state or federally designated endangered, threatened, and sensitive fish or wildlife species. A current list of federally and state identified species is available from the shoreline administrator.**

   b. **Priority Habitats and areas associated with Priority Species. Current lists of priority habitats and species and applicable management recommendations promulgated by the Washington Department of Fish and Wildlife are available from the shoreline administrator.**

   c. **Water bodies including lakes, streams, rivers and naturally occurring ponds.**

Response: The Applicant understands these designations.

2. **Habitat Location Information. Information on the approximate location and extent of habitat conservation areas is available from the shoreline administrator. The habitat location information is based on:**

   a. **Washington Department of Fish and Wildlife Priority Habitat and Species Maps.**

   b. **Washington Department of Fish and Wildlife Anadromous and Resident Salmonid Distribution Maps in the Salmon and Steelhead Habitat Inventory Assessment Program (SSHIAP).**

   c. **Washington Department of Natural Resources Official Water Type Reference Maps.**

   d. **Other information acquired by the city.**

Response: The project site is located in Lake River and is therefore designated a habitat conservation area.

B. Fish and Wildlife Habitat Conservation Areas and Riparian Buffers. Fish and wildlife habitat conservation areas within the city shall be established pursuant to the Washington State Department of Natural Resources Stream Typing System, as amended. Fish and wildlife habitat conservation areas shall be established by a qualified professional and shall be measured to include the land in each direction from the ordinary high water mark of the designated stream type.

1. **The minimum riparian buffer widths for stream types designated in accordance with the Washington State Department of Natural Resources (DNR) Stream Typing System shall be as described in Table 18.280.110-1.**

Response: The Applicant notes the project area is in Lake River, which is a shoreline of the state. The minimum riparian buffer width is designated as 150 feet. However, an existing asphalt trial along the Port of Ridgefield property is located parallel to the shoreline. The asphalt trail setback from the ordinary high water mark is greater than 150 feet along the northern portion of the property, and approximately 75 feet along the southern portion. Therefore, the required riparian buffer extends from the ordinary high water mark to 150 feet landward or to the existing asphalt trail (i.e., to the impervious surface), whichever is less. No development within the buffer is proposed as a result of project activities.

2. **Fish and wildlife habitat conservation areas and associated buffers shall be identified on the face of plat maps site plans or other development plans, and shall be protected in perpetuity with conservation covenants, deed restrictions or other legally binding mechanisms.**

Response: No new plat maps or additional development plans are proposed. Lake River is identified as a habitat conservation area per 18.280.110 (A.1.c) above.

3. **If impervious surfaces from previous development completely functionally isolate the designated stream type and associated buffer the regulated fish and wildlife habitat conservation shall extend from the ordinary high water mark to the impervious surfaces. An example would be an existing industrial paved area and warehouses in the riparian buffer.**

Response: Functionally isolated areas are generally defined as areas that do not provide vegetation or habitat functions to the adjacent critical areas. The existing asphalt trial along the Port of Ridgefield property is located parallel to the shoreline and does not provide habitat functions. The asphalt trail setback is greater than 150 feet along the northern portion of the property, and approximately 75 feet along the southern portion. Therefore, the required riparian buffer extends from the ordinary high water mark to 150 feet landward or to the existing asphalt trail (i.e., the impervious surface), whichever is less.

D. Performance Standards.

1. General.

a. **Development or clearing activities shall protect the functions of the fish and wildlife habitat conservation areas on the site. The activity shall result in no net loss of functions. Protection can be provided by avoiding (the preferred protection) or minimizing and mitigating. Functions include:**

i. **Providing habitat for breeding, rearing, foraging, protection and escape, migration, and over-wintering.**

ii. **Providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and**

infiltration, removing pollutants from water, and maintaining appropriate temperatures.

Response: The Applicant proposes a remedial action designed for environmental benefit. Lake River sediments are contaminated at levels that present unacceptable risk to ecological receptors. The proposed action provides for a net gain of ecological function, primarily by removal of contaminants to improve habitat, increase in native plant abundance and structure, and measures (slope stabilization and native plantings) to reduce erosion and runoff. The proposed action meets the standard.

b. **An applicant shall replace any lost functions by enhancement to other functions, so long as the applicant demonstrates that enhancement of the other functions provides no net loss in overall functions and maintains habitat connectivity. An example of unavoidable loss of function would be interruption of a travel corridor in a fish and wildlife habitat conservation area and its associated buffer. To the maximum extent feasible, enhancement shall be undertaken on-site.**

Response: Habitat is currently severely degraded, as sediment conditions are not protective of benthic and aquatic species that rely on benthos (e.g., biota may bioaccumulate contaminants). The proposed action provides for a net gain of ecological function, primarily by removal of contaminants to improve habitat, increase in native plant abundance and structure, and measures (slope stabilization and native plantings) to reduce erosion and runoff. The proposed action meets the standard.

c. **If development or clearing activity is within a priority habitat and species area the applicant shall follow Washington Department of Fish and Wildlife Management Guidelines or other standards approved by the Washington Department of Fish and Wildlife.**

Response: The Applicant notes the project is exempt from a WDFW Hydraulic Project Approval. However, substantive requirements developed for the project by WDFW will be met. The in-water work window designated by WDFW will be observed. The proposed action meets the standard.

d. **Signs for Fish and Wildlife Conservation Areas:**

i. **Temporary markers. The location of the outer perimeter of the fish and wildlife habitat conservation area shall be marked in the field, and such marking shall be approved by the shoreline administrator prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.**

ii. **Permanent signs. Wood or metal signs shall be posted at an interval of one per lot for single family residential uses or at a maximum interval of two hundred feet or as otherwise determined by the shoreline administrator, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the shoreline administrator: "The area beyond this sign is a fish**

and wildlife habitat conservation area. Alteration or disturbance is prohibited by law. Please call the City of Ridgefield for more information.

Response: Signs will be installed consistent with the applicable requirements. The proposed action meets the standard.

2. Fish and Wildlife Habitat Conservation Areas and Riparian Buffers.

a. **Fish and Wildlife Habitat Conservation Areas. Development or clearing activity may occur in Fish and Wildlife Habitat Conservation Areas for the following:**

i. **A water-dependent, water-related or water-enjoyment activity where there are no feasible alternatives that would have a less adverse impact on the fish and wildlife habitat conservation area or riparian buffer. The applicant shall minimize the impact and mitigate for any unavoidable impact to functions; or**

ii. **A road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, electric, cable, fiber optic cable, or telephone facility that cannot feasibly be located outside of the fish and wildlife habitat conservation area, that minimizes impacts, and that mitigates for any unavoidable impact to functions; or**

iii. **Trails and wildlife viewing structures provided that the trails and structures are constructed to minimize impacts.**

Response: The Applicant proposes a project required by the state for environmental benefit that has been designed to avoid, minimize, and mitigate for impacts. Other alternatives were evaluated but not selected as detailed in the Ecology-issued cleanup action plan. Clearing of native vegetation will be replaced at a 2:1 ratio. The proposed action meets the standard 2(a)(i).

b. **Riparian Buffer. Development or clearing activity may occur in the riparian buffer, provided that mitigation is conducted that results in no net loss of riparian habitat functions on the site, and further, that functionally significant habitat, defined as habitat that cannot be replaced or restored within twenty years, shall be preserved unless the clearing or development activity cannot feasibly be located on the site outside of the riparian buffer. An example of habitat that cannot be replaced within twenty years would be a stand of mature trees or a peat bog.**

Response: The Applicant proposes to stabilize the bank within the riparian buffer. This includes clearing of vegetation (primarily non-native) and installation of turf reinforcement and native plants to reduce run-off and erosion. Planting of native vegetation includes approximately 50 trees. Therefore, bank stabilization elements cannot be feasibly located outside of the riparian buffer and native plantings and improved erosion- and runoff control will result in no net loss of riparian function. The proposed action meets the standard.

c. **Buffer Width Averaging. The shoreline administrator may allow buffer width averaging in accordance with an approved critical area report on a case-by-case basis. Buffer width averaging shall not be used in combination with buffer width reduction on the same buffer segment to reduce the minimum buffer width below that specified in this chapter. Averaging of buffer widths may only be allowed where a qualified ecologist or biologist demonstrates that:**

i. **Such averaging will not reduce functions or functional performance; and**

ii. **The fish and wildlife habitat conservation area varies in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; and**

iii. **The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and**

iv. **The buffer width is reduced by no more than fifty percent of the standard width and at no point to less than twenty-five feet.**

Response: No buffer width averaging is proposed.

d. **Buffer Width Reduction. The shoreline administrator may authorize the reduction of required buffer widths to a lesser width provided that an applicant demonstrates compliance with the following:**

i. **Written evidence prepared by a qualified ecologist or biologist addressing the proposed buffer width reduction and demonstrating how the reduced buffer will enhance the functions and values of the fish and wildlife habitat conservation area.**

ii. **The remaining buffer area shall be intensely planted with a mixture of native vegetation pursuant to an approved landscape plan prepared by a registered landscape architect in the State of Washington and reviewed and certified by a qualified ecologist or biologist certifying that the plantings to be used in the remaining buffer area will compliment and support the functions and values of the fish and wildlife habitat conservation area.**

iii. **The remaining buffer area shall be managed by the applicant or applicant's successor in interest for a minimum of three years following the city's final acceptance of any portion or phase of the project. A detailed management plan prepared by a qualified ecologist or biologist shall be submitted for city**

review and approval prior to the City's authorization of any on-site construction, unless otherwise authorized by the shoreline administrator. The detailed management plan shall address among other things the replanting of dead or dying plant material, the contents and submittal to the city of annual monitoring report prepared by a qualified ecologist or biologist with the cost of this report to be borne entirely by the applicant or applicant's successor in interest and methods to address any identified problems with the buffer's support of the functional value of the fish and wildlife habitat conservation area.

Response: The required buffer extends from the ordinary high water mark to the functionally isolated boundary/existing asphalt trail associated with the Port property.

e. **Buffer width reduction shall not be used in combination with buffer width averaging on the same buffer segment, but can be used in combination with the same wetland resource. Where multiple resources exist on a property or site, the shoreline administrator may authorize the use of buffer width averaging and buffer width reduction on different resources on the property or site provided that any required scientific analysis or reporting addresses and supports the separate use.**

Response: No buffer width averaging is proposed.

f. **Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, buffers for fish and wildlife habitat conservation areas shall be maintained according to the approved critical area permit.**

Response: The Applicant understands the standard.

g. **Buffer Uses. The following uses may be permitted within a buffer for a fish and wildlife habitat conservation area in accordance with the review procedures of this chapter; provided, they are not prohibited by any other applicable law or regulation and they are conducted in a manner so as to minimize impacts to the buffer and the wetland:**

i. **Activities allowed under the same terms and conditions as in the associated fish and wildlife habitat conservation areas.**

ii. **Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife.**

iii. **Passive recreation facilities including trails and wildlife viewing structures, provided that the trails and structures are constructed with a surface that does not interfere with wetland hydrology.**

iv. **Stormwater management facilities limited to detention facilities, constructed wetlands, stormwater dispersion outfalls and**

bioswales, may be constructed in accordance with an approved critical area report.

Response: The Applicant proposes a remedial action aimed at protecting ecological receptors and enhancing the plant community. The proposed action meets the standard.

3. Signs and Fencing of Fish and Wildlife Habitat Conservation Areas:

a. **The location of the outer perimeter of the fish and wildlife habitat conservation areas and its buffer shall be marked in the field, and such marking shall be approved by the shoreline administrator prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.**

b. **A permanent physical demarcation along the upland boundary of the fish and wildlife habitat conservation area buffer shall be installed and thereafter maintained. Such demarcation may consist of fencing, hedging or other prominent physical marking that allows wildlife passage, blends with the wetland environment, and is approved by the shoreline administrator.**

c. **Permanent fencing of the fish and wildlife habitat conservation area buffer on the outer perimeter shall be erected and thereafter maintained when there is a substantial likelihood of the presence of domestic grazing animals within the property unless the shoreline administrator determines that the animals would not degrade the functions of the fish and wildlife habitat conservation area or buffer.**

d. **Wood or metal signs shall be posted at an interval of one per lot for single family residential uses or at a maximum interval of two hundred feet or as otherwise determined by the shoreline administrator, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the shoreline administrator: "The area beyond this sign is a fish and wildlife habitat conservation area or fish and wildlife habitat conservation area buffer. Alteration or disturbance is prohibited by law. Please call the City of Ridgefield for more information."**

Response: Signs will be installed consistent with the applicable requirements. The proposed action meets the standard.

CHAPTER 5B 18.750
FLOOD CONTROL

18.750.030 General provisions.

A. **Lands to Which this Chapter Applies. This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city of Ridgefield.**

Response: The Applicant understands that the provisions of this chapter apply to the Lake River remedial project pursuant to the applicable Flood Insurance Rate Map.

18.750.060 - Specific standards.

B. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

Response: The standard is not applicable. The Applicant is not proposing new construction or substantial improvement of any commercial, industrial or other nonresidential structure.

F. Floodways and Channel Migration Zones. Located within areas of special flood hazard are areas designated as floodways and channel migration zones. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris, and increase erosion potential, and channel migration zones are hazardous due to alteration of the location of the watercourse by natural processes, the following provisions apply:

Response: As shown on FEMA FIRM 53011C0184, the frequently flooded areas of the project site are part of the Columbia River flood fringe – within Zone AE but outside the floodway. The proposed action is not within a floodway.

G. Critical Facility. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (one-hundred-year floodplain). Construction of new critical facilities shall be permissible within the SFHA in accordance with Section 18.750.060(F) if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above BFE or to the height of the five-hundred-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Response: The standard is not applicable. No new critical facilities are proposed.

CHAPTER 6
SPECIFIC SHORELINE USE REGULATIONS

6.4.2 Dredging and Dredge Material Disposal

6.4.2.1 General

1. **Dredging and dredge disposal shall be prohibited on or in archaeological sites that are listed on the National Register of Historic Places, the Washington Heritage Register, and/or the Clark County Heritage Register until such time that they have been reviewed and approved by the appropriate agency.**

Response: The site is not listed in the registers identified above. The Applicant has engaged a qualified professional to identify cultural resources at the site and the COE is conducting Section 106 review for cultural resources. Sediment excavation (as currently designed) will occur only if it is determined that no significant archaeological or historical resources would be affected by the proposed action. The proposed action meets the standard.

2. **Dredging and dredge disposal shall be scheduled to protect biological productivity (including but not limited to, fish runs, spawning, and benthic productivity) and to minimize interference with fishing activities. Dredging activities shall not occur in areas used for commercial fishing (including but not limited to, drift netting and crabbing) during a fishing season unless specifically addressed and mitigated for in the permit.**

Response: The Applicant proposes to conduct work during an in-water work window designated by WDFW and COE to protect biological productivity. The project area is not a commercial fishing area. The proposed action meets the standard.

6.4.2.2 Dredging

1. **Dredging shall be avoided where possible. Dredging shall be permitted only where it is demonstrated that the proposed water-dependent or water-related uses will not result in significant or ongoing adverse impacts to water quality, fish and wildlife habitat conservation areas and other critical areas, flood holding capacity, natural drainage and water circulation patterns, significant plant communities, prime agricultural land, and public access to shorelines unless one or more of these impacts cannot be avoided. When such impacts are unavoidable, they shall be minimized and mitigated such that they result in no net loss of shoreline ecological functions.**

Response: No water-dependent or water-related uses are proposed. The proposed action involves the dredging and disposal of contaminated sediments for environmental remediation. The project is designed to improve the shoreline ecological functions. The proposed action meets the standard.

2. **Maintenance dredging of established navigation channels and basins shall be restricted to managing previously dredged and/or existing authorized location, depth and width.**

Response: No maintenance dredging is proposed.

3. **Dredging activity is prohibited in the following locations:**

a. **Along net positive drift sectors and where geohydraulic-hydraulic processes are active and accretion shore forms would be damaged, altered, or irretrievably lost;**

b. **In shoreline areas with bottom materials that are prone to significant sloughing and refilling due to currents or tidal activity which result in the need for continual maintenance dredging;**

c. **In habitats identified as critical to the life cycle of officially designated or protected fish, shellfish, or wildlife.**

Response: No known net positive drift sectors, shorelines with bottom materials that are prone to significant sloughing and refilling, or habitats identified as critical to the life cycle of officially designated or protected fish, shellfish, or wildlife are present. The criteria do not apply.

4. **Dredging techniques that cause minimum dispersal and broadcast of bottom material shall be used, and only the amount of dredging necessary shall be permitted.**

Response: The work will be conducted by a highly prescriptive precision dredging method under the requirements of a water quality plan meeting the substantive requirements of the Clean Water Act Section 401 Water Quality Certification. This water quality plan was developed by the Port and approved by Ecology. Only the minimum amount of dredging necessary to complete the remedial action is proposed. The proposed action meets the standard.

5. **Dredging shall be permitted only:**

a. **For navigation or navigational access;**

b. **In conjunction with a water-dependent use of water bodies or adjacent shorelands;**

c. **As part of an approved habitat improvement project;**

d. **To improve water flow or water quality, provided that all dredged material shall be contained and managed so as to prevent it from reentering the water; or**

e. **In conjunction with a bridge, navigational structure or wastewater treatment facility for which there is a documented public need and where other feasible sites or routes do not exist.**

Response: The proposed dredging is pursuant to a consent decree between Ecology and the Applicant. The dredging is proposed to improve water quality and remedy sediments to be protective of ecological receptors. The proposed action meets the standard.

6. **Dredging for fill is prohibited except where the material is necessary for restoration of shoreline ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the ordinary high-water mark. The project must be either associated with a MTCA or CERCLA habitat restoration project or, if approved through a shoreline Shoreline**

Conditional Use Permit, any other significant habitat enhancement project (WAC 173-26-231(3)(f)).

Response: No dredging for fill is proposed. The criteria do not apply.

6.4.2.3 Dredge Material Disposal

1. **Dredge material disposal shall be avoided where possible. Dredge disposal shall be permitted only where it is demonstrated that the proposed water-dependent or water-related uses will not result in significant or ongoing adverse impacts to water quality, fish and wildlife habitat conservation areas and other critical areas, flood holding capacity, natural drainage and water circulation patterns, significant plant communities, prime agricultural land, and public access to shorelines. When such impacts are unavoidable, they shall be minimized and mitigated such that they result in no net loss of shoreline ecological functions.**

Response: No onsite disposal of dredge material is proposed. Disposal of the dredge material is proposed in a permitted, Subtitle D landfill. The criteria do not apply.

2. **Near shore or landside disposal of dredge materials shall not be located upon, adversely affect, or diminish:**

   a. **Stream mouths, wetlands, or significant plant communities (approved mitigation plans may justify exceptions);**

   b. **Prime agricultural land except as enhancement;**

   c. **Natural resources including but not limited to sand and gravel deposits, timber, or natural recreational beaches and waters except for enhancement purposes;**

   d. **Designated or officially recognized wildlife habitat and concentration areas;**

   e. **Water quality, quantity, and drainage characteristics; and**

   f. **Public access to shorelines and water bodies.**

Response: Disposal of the dredge material will occur in a permitted, Subtitle D landfill. The criteria do not apply.

3. **Dredge material shall be disposed of on land only at sites reviewed and approved by the USACOE and the Shoreline Administrator. Applicants shall demonstrate that the proposed site will ultimately be suitable for a use permitted by this Program. Disposal shall be undertaken such that:**

   a. **The smallest possible land area is affected, unless dispersed disposal is authorized as a condition of permit approval for soil enhancement or other purposes;**

b. **Shoreline ecological functions and processes will be preserved, including protection of surface and ground water;**

c. **Erosion, sedimentation, floodwaters or runoff will not increase adverse impacts to shoreline ecological functions and processes or property; and**

d. **Sites will be adequately screened from view of local residents or passersby on public right-of-ways to the maximum extent practicable.**

Response: As the dredge material is contaminated, it will be disposed of in a permitted, Subtitle D landfill. The criteria do not apply.

4. **The following conditions shall apply to land disposal sites:**

Response: Disposal will occur elsewhere. The criteria do not apply.

5. **Dredge material shall be disposed of in water only at sites approved by the USACOE and the Shoreline Administrator. Disposal techniques that cause minimum dispersal and broadcast of bottom material shall be used, and only if:**

Response: No in water disposal is proposed. The criteria do not apply.

6. **The deposition of dredged materials in water or wetlands shall be permitted only in approved, open water disposal sites and:**

a. **To improve wildlife habitat;**

b. **To correct material distribution problems adversely affecting fish habitat;**

c. **To create, expand, rehabilitate, or enhance a beach when permitted under this Program and any required state or federal permit; or**

d. **When land deposition is demonstrated to be more detrimental to shoreline resources than water deposition.**

Response: No in water or wetland disposal of dredge material is proposed. The criteria do not apply.

6.4.3.3 In-stream Structures

Response: In-stream structures are not proposed. The current proposal relates only to the shoreline of Lake River. The criteria do not apply.

6.4.4 Shoreline Restoration and Enhancement

1. **Shoreline restoration and enhancement activities designed to restore shoreline ecological functions and processes and/or shoreline features should be targeted toward meeting the needs of sensitive and/or regionally important plant, fish, and wildlife species and shall be given priority. Implementation of**

restoration projects on shorelines of statewide significance take precedence over implementation of restoration projects on other shorelines of the state.

Response: The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment and clean sand placement, bank stabilization, and re-vegetation; the remediation is required by the state. The proposed project meets the standard.

2. **Shoreline restoration, enhancement, and mitigation activities designed to create dynamic and sustainable ecosystems to assist the city in achieving no net loss of shoreline ecological functions are preferred.**

Response: The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment and clean sand placement, bank stabilization, and re-vegetation; the remediation is required by the state. The proposed project meets the standard.

3. **Restoration activities shall be carried out in accordance with an approved shoreline restoration plan, and in accordance with the provisions of this Program.**

Response: Restoration is typically non-regulatory voluntary, and most often undertaken by public agencies, environmental stewardship groups, or local governments often in partnership with private landowners. The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment and clean sand placement, bank stabilization, and re-vegetation; the remediation is required by the state. The standard does not apply.

4. **To the extent possible, restoration, enhancement, and mitigation activities shall be integrated and coordinated with other parallel natural resource management efforts. Implementation of restoration projects identified in the Shoreline Restoration Plan that are focused on restoring degraded habitat in shoreline jurisdiction take precedence over other restoration projects.**

Response: Restoration is typically non-regulatory voluntary, and most often undertaken by public agencies, environmental stewardship groups, or local governments often in partnership with private landowners. The Applicant proposes to rehabilitate degraded habitat through removal of contaminated sediment and clean sand placement, bank stabilization, and re-vegetation; the remediation is required by the state. The standard does not apply.

5. **Habitat and beach creation, expansion, restoration, and enhancement projects may be permitted subject to required state or federal permits when the applicant has demonstrated that:**

    a. **The project will not adversely impact spawning, nesting, or breeding fish and wildlife habitat conservation areas;**

    b. **Upstream or downstream properties or fish and wildlife habitat conservation areas will not be adversely affected;**

    c. **Water quality will not be degraded;**

d. **Flood storage capacity will not be degraded;**

e. **Streamflow will not be reduced;**

f. **Impacts to critical areas and buffers will be avoided and where unavoidable, minimized and mitigated; and**

g. **The project will not interfere with the normal public use of the navigable waters of the state.**

Response: The proposed project is not a habitat and beach creation, expansion, restoration, or enhancement project. The standard does not apply. However, the Applicant demonstrates in the JARPA that standards 5(a-g) will be met.

6.4.5 Shoreline Stabilization – General

1. **New shoreline stabilization to protect new residential development is prohibited. For other types of new development new shoreline stabilization is prohibited unless it can be demonstrated through a geotechnical analysis by a qualified professional that:**

   a. **The proposed use cannot be developed without shore protection; or**

   b. **Shore protection is necessary to restore ecological functions; or**

   c. **Shore protection is necessary for a hazardous substance remediation project.**

Response: No new residential development is proposed. The proposed shoreline stabilization measures are part of a remedial action pursuant to a consent decree. The proposed shoreline stabilization measures have been designed by a professional civil engineer licensed in the state of Washington. The proposed shoreline stabilization measures will function as a cap to contain potentially contaminated soil in the river bank and to maintain the integrity of the existing clean soil cap above OHWM. The proposed shoreline stabilization measures have been designed to restore shoreline ecological functions and processes. The criteria are met.

2. **New or expanded shore stabilization shall:**

   a. **Be designed using best available science and in accordance with applicable Ecology and WDFW guidelines;**

   b. **Not result in a net loss of shoreline ecological functions;**

   c. **Not cause significant erosion or beach starvation;**

   d. **Not be located where valuable geohydraulic, hydraulic, or biological processes are sensitive to interference and critical to shoreline conservation;**

e. **Document that alternative solutions (including relocation or reconstruction of existing structures) are not feasible or do not provide sufficient protection;**

f. **Demonstrate that future stabilization measures would not be required on the project site or adjacent properties; and**

g. **Be certified by a qualified professional.**

Response: The Applicant has designed the proposed work using best available science and in accordance with applicable federal, Ecology, and WDFW guidelines. The proposed work is designed to increase shoreline ecological functions and is designed to resist, not cause, erosion. The proposed work is not located where valuable geohydraulic, hydraulic, or biological processes are sensitive to interference and critical to shoreline conservation. The proposed shore stabilization measures are flexible stabilization works constructed of natural materials – including rounded fish mix rock and vegetative stabilization. The proposed measures do not require the new construction of, relocation of, or reconstruction of structural support measures. Future stabilization measures will not be required on the project site or adjacent properties. The proposed work has been designed by a professional civil engineer licensed in the state of Washington. The criteria are met.

3. **New or expanded structural shoreline stabilization for existing primary structures, including roads, railroads, and public facilities is prohibited unless there is conclusive evidence documented by a geotechnical analysis that there is a significant possibility that the structure will be damaged within three years as a result of shoreline erosion caused by stream processor waves, and only when significant adverse impacts are mitigated to ensure no net loss of shoreline ecological functions and/or processes.**

Response: No new or expanded structural shoreline stabilization is proposed. The criterion does not apply.

4. **Where a geotechnical analysis confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years, the analysis may still be used to justify more immediate authorization for shoreline stabilization using bioengineering approaches.**

Response: All remnants of existing primary structures will be removed. The criterion does not apply.

5. **Replacement of an existing shoreline stabilization structure with a similar structure is permitted if there is a demonstrated need to protect existing primary uses, structures or public facilities including roads, bridges, railways, and utility systems from erosion caused by stream undercutting or wave action; provided that, the existing shoreline stabilization structure is removed from the shoreline as part of the replacement activity. Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or existing structure unless the structure is a residence that was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. New or expanded shore stabilization shall be designed in accordance with**

applicable Ecology and WDFW guidelines and certified by a qualified professional.

Response: No replacement of existing structures is proposed. The criterion does not apply.

6. **Shoreline stabilization projects that meet the criteria of Section 2.3.2(18) require a Shoreline Statement of Exemption (Section 2.3.3) and if exempt will be regulated under RCW 77.55.181. Stabilization projects that do not meet these criteria will be regulated by this Program.**

Response: The proposed action is not a project designed to fish or wildlife habitat or fish passage. The criterion does not apply

7. **Small-scale or uncomplicated shoreline stabilization projects (for example, tree planting projects) shall be reviewed by a qualified professional to ensure that the project has been designed using best available science.**

Response: The criterion does not apply.

8. **Large-scale or more complex shoreline stabilization projects (for example, projects requiring fill or excavation, placing objects in the water, or hardening the bank) shall be designed by a qualified professional using best available science. The applicant may be required to have a qualified professional oversee construction or construct the project.**

Response: As noted above, the proposed work has been designed by a professional civil engineer licensed in the state of Washington using the best available science. The proposed work will be overseen by a professional engineer licensed in the state of Washington. The proposed action meets the criteria.

9. **Standards for new stabilization structures when found to be necessary include limiting the size to the minimum necessary to achieve the stabilization objective, using measures to assure no net loss of shoreline ecological functions, using soft approaches, and mitigating for impacts.**

Response: The proposed work has been designed by a professional civil engineer licensed in the state of Washington to minimize the overall stabilization footprint. The proposed work includes soft approaches such as turf reinforcement mat with native vegetation and has been designed to improve shoreline ecological functions.

RIDGEFIELD DEVELOPMENT CODE (RDC)

18.280.120 Frequently flooded areas.

Refer to RDC Chapter 18.750, Flood Control, for all requirements and standards regarding frequently flooded areas (shown below).

18.750.030 General provisions.

A. **Lands to Which this Chapter Applies. This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city of Ridgefield.**

Response: The Applicant understands the applicability of this chapter.

B. **Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report titled "The Flood Insurance Study for Clark County, Washington, and Incorporated Areas" dated September 5, 2012, and any revisions thereto, with accompanying Flood Insurance Rate Map (FIRM) dated September 5, 2012, and any revisions thereto, are adopted by reference and declared to be a part of this chapter. The Flood Insurance Study and the FIRM are on file at Ridgefield City Hall, 230 Pioneer Avenue, Ridgefield, Washington. The best available information for flood hazard area identification as outlined in Section 18.750.040(D)(2) shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under section 18.750.040(D)(2).**

Response: The Applicant understands that the above referenced documents serve as the basis of the City's Areas of Special Flood Hazard.

C. **Penalties for Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions), shall be remedied through the provisions of Chapter 18.395, Enforcement Procedures and Penalties. Nothing herein contained shall prevent the city of Ridgefield from taking such other lawful action as is necessary to prevent or remedy any violation.**

Response: The Applicant understands the penalties for noncompliance.

D. **Abrogation and Greater Restrictions. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.**

Response: The Applicant understands that the more restrictive provisions of either this chapter or any other underlying instrument shall supersede.

E. **Interpretation. In the interpretation and application of this chapter, all provisions shall be:**

1. **Considered as minimum requirements;**

2. **Liberally construed in favor of the governing body; and**

3. **Deemed neither to limit nor repeal any other powers granted under state statutes.**

Response: The Applicant understands the criterion.

F. **Warning and Disclaimer of Liability. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city of Ridgefield, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.**

Response: The Applicant understands and acknowledges this criterion.

18.750.040 Administration.

A. **Development Permit Required. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 18.750.020(B). The permit shall be for all structures including manufactured homes, as set forth in the "definitions," and for all development including fill and other activities, also as set forth in the "definitions."**

Response: The Applicant understands that a development permit would otherwise be required for the currently proposed project. However, pursuant to RCW 70.150D.090, the project is exempt from obtaining local permits. The applicant is providing demonstration of compliance with the substantive requirements of the underlying ordinance.

18.750.050 Provisions for flood hazard reduction.

A. **Anchoring.**

1. **All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.**

2. **All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. For more detailed information, refer to the latest edition of document,**

FEMA P-85, "Protecting Manufactured Homes from Floods and Other Hazards."

Response: No new structures or substantial improvements are proposed. The criteria do not apply.

B. **Construction Materials and Methods.**

1. **All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.**

2. **All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.**

3. **Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Locating such equipment below the base flood elevation may cause annual flood insurance premiums to be increased.**

Response: No new structures or substantial improvements are proposed. The proposed shoreline stabilization has been designed to minimize erosion during a potential flood event.

C. **Utilities.**

1. **All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems;**

2. **Water wells shall be located on high ground that is not in the floodway;**

3. **New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;**

4. **On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.**

Response: The criteria do not apply.

D. **Subdivision Proposals.**

Response: The criteria do not apply.

18.750.060 Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Sections 18.750.030(B) or 18.750.040(D)(2), the following provisions shall apply.

A. Residential Construction.

B. Nonresidential Construction.

C. Manufactured Homes.

D. Recreational Vehicles.

Response: The current proposed remedial action does not include construction of the above mentioned uses. The criteria do not apply.

E. **AE Zone with Base Flood Elevations but No Floodways. In areas with base flood elevations (but a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within Zone AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.**

Response: As shown on FIRM 53011C0184, the frequently flooded areas of the project site are part of the Columbia River flood fringe - within AE Zone. A regulatory floodway has been designated for the Columbia River and is shown on FIRM 53011C0184. The criteria do not apply.

F. **Floodways. Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris, and increase erosion potential, the following provisions apply:**

Response: As shown on FEMA FIRM 53011C0184, the frequently flooded areas of the project site are part of the Columbia River flood fringe – within Zone AE but outside the floodway. The proposed action is not within a floodway. The criteria do not apply.

G. **Critical Facility. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (one-hundred-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above BFE or to the height of the five-hundred-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.**

Response: No new critical facilities are proposed. The criteria do not apply.

18.830.040 Native plants.

The native plant list in this section identifies native plants historically found in this area. The list divides plants into three groups: trees and arborescent shrubs, shrubs, and ground covers. Arborescent shrubs are indicated with an "AS" superscript. These shrubs may not be used to meet criteria or conditions of approval which require trees. For each group, the list includes the scientific (Latin) name, common name, indicator status and the habitat types where the plant is most likely to be found.

The indicator status refers to the frequency with which a plant occurs in a wetland; the categories are derived from the National List of Plant Species That Occur In Wetlands: 1988 National Summary (USFWS, Biological Report 88(24), 1988). The indicator categories are as follows:

A. **Obligate Wetland (OBL): occur almost always (estimated probability greater than ninety-nine percent) under natural conditions in wetlands.**

B. **Facultative Wetland (FACW): Usually occur in wetlands (estimated probability sixty-seven percent to ninety-nine percent), but occasionally found in non-wetlands.**

C. **Facultative (FAC): equally likely to occur in wetlands or non-wetlands (estimated probability thirty-four percent to sixty-six percent).**

D. **Facultative Upland (FACU): usually occur in nonwetlands (estimated probability sixty-seven percent to ninety-nine percent), but occasionally found in wetlands (estimated probability one percent to thirty-three percent).**

E. **Obligate Upland (UPL): occur in wetlands in another region, but occur almost always (estimated probability greater than ninety-nine percent) under natural conditions in nonwetlands in the Northwest region.**

Response: The Applicant has proposed a planting plan for the remedial action (see Exhibits L1.0 and L1.1). Plants suited to the riparian habitat are selected. All plants selected are native species that are identified as historically found in this area. The standard is met.

SUBSTANTIVE REQUIREMENTS OF HYDRAULIC PROJECT APPROVAL
Pacific Wood Treating Site: Lake River Remedial Action

Ecology has solicited the substantive requirements of the Washington Department of Fish and Wildlife Hydraulic Project Approval and has identified the following requirements:

- Work below the ordinary high water line shall only occur between OCTOBER 1, 2014 and JANUARY 15, 2015.

- Dredging equipment shall be well-maintained and in good repair to prevent the loss of lubricants, grease, and any other deleterious materials from entering the stream.

- All containers storing fuel or other deleterious substances on the barge shall be secured during dredging operations to prevent incidental spills.

- If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), immediate notification shall be made to the Washington Military Department's Emergency Management Division at 1-800-258-5990, and to Anne Friesz, Assistant Regional Habitat Program Manager at 360-906-6764.

- Every effort shall be taken during all phases of this project to ensure that sediment-laden water is not allowed to enter the stream.

- Turbidity will be measured during construction and will meet the water quality criteria established by Washington Department of Ecology.

- Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.

- Bank or bulkhead stabilization work shall be restricted to work necessary to protect the eroding bank.

- Native vegetation removed during construction will be replaced at a 2:1 lineal footage ratio