

Name and Address of the Responsible Federal Agency for the Project

United States Army Corps of Engineers
333 SW First Avenue
Portland, OR 97204-3495
Project Manager: Laura Hicks

Relationship to Property

Upland Disposal, ecosystem restoration and mitigation will occur on properties under a variety of ownerships in Washington and Oregon. The sponsor ports will acquire ownership of or easements for, or will otherwise enter into agreements with property owners allowing use of identified properties for disposal, ecosystem restoration or mitigation.

Name and Address of Property Owners

The names and addresses of the owners of the upland properties to be used for disposal, ecosystem restoration or mitigation are provided in attachment A (this attachment was previously provided).

Location Where Proposed Activity Will Occur

Attached Figures 1 through 8 show the specific locations in the Columbia River where dredging will occur, the location of proposed upland disposal sites and the Deep Water Site, the location of proposed ecosystem restoration features and the location of proposed mitigation projects. The Deep Water Site is west of the mouth of the Columbia River off the Oregon coast and is outside the territorial sea.

Project work will be conducted in the Columbia River to include the following water bodies:

Washington

- Lake River, WA - work associated with outlet to Shillapoo Lake Ecosystem Restoration Feature
- Bachelor Slough, WA - work associated with Bachelor Slough Ecosystem Restoration Feature
- Burris Creek, WA, a tributary to Burke Slough, which connects to Martin Slough, a side channel of the Columbia River - work associated with Tidegate Retrofits Ecosystem Restoration Feature
- Martin Island embayment off Martin Slough, WA; a side channel of Columbia River - wildlife mitigation effort
- Deep River, WA, a tributary of the Columbia River - work associated with Tidegate Retrofits Ecosystem Restoration Feature.

Oregon

- Multnomah Channel, OR - access route for pipeline or barges for disposal at Lonestar Gravel Pit and/or Railroad Corridor disposal sites
- Tide Creek, Deer Island, OR - work associated with Tidegate Retrofits Ecosystem Restoration Feature
- Webb Mitigation Site, OR - lies adjacent to Westport Slough, a side channel of Clatskanie and Columbia Rivers - wildlife mitigation effort
- Grizzly Slough, OR off Blind Slough, a side channel off Prairie Channel which is a side channel of the Columbia River - work associated with Tidegate Retrofits Ecosystem Restoration Feature
- Hall Creek, OR off Warren Slough, a side channel off Knappa Slough which is a side channel of the Columbia River - work associated with Tidegate Retrofits Ecosystem Restoration Feature
- Lois Island Embayment Ecosystem Restoration Feature, OR, off South Channel, a side channel of the Columbia River

Current Use of the Property, and Structures Existing on the Property

The proposed dredging and in-water disposal will occur in or near areas where such use has previously occurred.

Most of the upland disposal sites in Washington (12 out of 16) as well as the shoreline disposal site in Washington are currently or have previously been used for disposal of dredge materials. The four new upland sites (Gateway, Adjacent Fazio, Mt Solo, and Puget Island) are currently being farmed. The use of each upland disposal site, including its history of prior use as a disposal site, is described in attached Table 1.

Portions of the mitigation sites are currently being farmed.

Six ecosystem restoration sites will be constructed in the state of Washington. Land use in those areas consisted of:

- Purple Loosestrife Control Program: This effort would occur on intertidal marsh lands between Columbia River Mile 18 (Tongue Point) and 52 (Eureka Bar). The Washington location is the shoreline between Harrington Point and Portuguese Point, Three Tree Point, the mouth of the Elochoman River, and intertidal marshlands surrounding Puget and adjacent islands.
- Tidegate Retrofits for Salmonid Passage:

Deep River: Several potential locations. Principal land use is a flood control levee with a county road in some locations atop the levee. Adjacent land use is agricultural.

Burriss Creek: Principal land use is a flood control levee with a county road atop the levee. Adjacent land use is agricultural.

Tide Creek: Principal land use is a flood control levee. Adjacent land use is agricultural.

- Improved Embayment Circulation:

Fisher-Hump Islands: A portion of the land is used as a dredged material disposal site.

- Howard-Cottonwood Island Columbian White-tailed Deer Reintroduction: A portion of the land is used as a dredged material disposal site.
- Bachelor Slough Restoration: Land is predominately a national wildlife refuge (Ridgefield NWR).
- Shillapoo Lake: Land is predominately a state wildlife management area (WDFW lands); the remaining land is agricultural.

Complete Description of the Project Proposal

The proposed action is to deepen the Columbia River Federal Navigation Channel in Washington and Oregon between Columbia River Mile (CRM) 3 and CRM 106.5 from the currently authorized 40-foot depth with advanced maintenance to 45-feet, to an authorized depth of 43-feet with advanced maintenance to 48-feet based on the recommendations in the *Final Integrated Feasibility Report for Channel Improvements and Environmental Impact Statement* dated August 1999 and the *Draft Supplemental Integrated Feasibility Report and Environmental Impact Statement* dated July 2002. (The Final SEIS is expected to be released to the public no later than January 30, 2003.)

Specific activities include: 1) dredging the Columbia River Federal Navigation Channel in selected locations between CRM 3 and CRM 106.5 to increase the authorized channel depth to 43 feet (including: advanced maintenance dredging for overwidth and overdepth, 3 turning basins); 2) disposing of dredged materials; 3) constructing mitigation features; and 4) constructing ecosystem restoration features. These activities are described in detail in Sections 4.7 and 4.8 of the Final IFR/EIS and Draft Supplemental IFR/EIS, Chapter 3 of the BA, and in the Draft Wetland Mitigation Plan, Exhibit K in the Draft Supplement EIS, and Technical Memorandum Consistency with Local Critical Area Ordinances.

Ecosystem restoration features are located at the following locations:

Oregon

Lois Island
Miller/Pillar
Tide Creek
Grizzly Slough
Hall Creek
Walker/Lord Islands
Tenasillahe Island

Washington

Burris Creek
Deep River
Fisher/Hump Islands
Cottonwood/Howard Island,
Shillapoo Lake
Bachelor Slough

Purple Loosestrife Control Program throughout the estuary in both states

The Draft SEIS describes two ecosystem restoration features, including restoration of tidal marsh and/or shallow water habitat at Miller-Pillar and Lois Island embayment. Construction of the Millar-Pillar and Lois Island embayment features would use dredged materials from construction and maintenance that otherwise would have been taken to the ocean. With the implementation of these two ecosystem restoration sites, the placement of dredge material in the ocean would not be necessary. In the event dredge material from the channel did go to the ocean it would be discharged into a site designated under Section 102 of the Ocean Dumping Act. Such discharge would be in accordance with the management and monitoring plan as required by the Ocean Dumping Act. At this point in time, we fully anticipate that the Deep Water Site would be the site designated under Section 102. A complete set of project documents, including project maps have been provided to WDOE staff.

The Purpose of the Proposed Work and Determination of Project Elements

The purpose for the project is to improve the deep-draft transport of goods on the Columbia and Lower Willamette Rivers navigation channel, and to provide ecosystem restoration for fish and wildlife habitats. The purpose and need are described more fully in Section 1.1 of the Final IFR/EIS and Draft Supplemental IFR/EIS and in Sections 1.1.1 and 1.1.2 of the BA.

The sites proposed for the work result from a number of factors including:

- The location for dredging is dictated by the location of the existing federally authorized channel and the location of shoaling therein.
- The location of flowlane disposal changes over time with sand movement in the River.
- Shoreline disposal is proposed for one site in Washington approved as suitable for such activities by the National Marine Fisheries Service.
- Due to operational limitations of hopper, pipeline and clamshell dredges, upland disposal sites must be in close proximity to the river in order to move the materials directly to the disposal site. This requires upland sites all along the river.
- Existing and previously used upland disposal sites were selected to the extent practicable to avoid and minimize impacts to new areas.
- New upland sites were also selected to avoid and minimize impacts to wetlands, riparian habitats and important wildlife resources to the extent practicable. Adjustment of disposal site boundaries to avoid riparian and wetland habitat, based upon site visits and review of aerial photography, also was used. Site boundaries were further adjusted and acreage decreased through the 2001 BA and during development of the draft Supplemental IFR/EIS as a result of applying shoreline and zoning designations (reference the critical area ordinances and project maps previously provided).
- Ocean disposal was selected based on the review process summarized in Appendix H to

the Final IFR/EIS (*Columbia River Ocean Dredged Material Disposal Sites*) and comments on the Draft IFR/EIS. With the implementation of these two estuarine restoration sites, the placement of dredge material in the ocean would not be necessary. In the event dredge material from the channel did go to the ocean it would be discharged into a site designated under Section 102 of the Ocean Dumping Act. Such discharge would be in accordance with the management and monitoring plan as required by the Ocean Dumping Act. At this point in time, we fully anticipate that the Deep Water Site would be the site designated under Section 102.

- Mitigation sites were selected using an interagency process and are intended to create large mitigation sites, rather than a greater number of smaller sites. This mitigation selection philosophy is intended to improve the function and value of the mitigation wetlands over the affected wetlands. There are two mitigation sites within the State of Washington: Martin Island and Woodland Bottoms.
- Ecosystem restoration sites were selected to restore habitat and improve conditions for the survival of listed salmon stocks as well as to improve wildlife habitat. The FEIS presented three restoration features that were selected based on input from state and Federal resource agencies. As a result of the ESA consultation six additional restoration features were added to the project. Function, form and value were the primary criteria used to evaluate and select these restoration features. The restoration features of the six Washington sites are:

Purple Loosestrife Control Program

The current general NPDES permit number WAG-993000 will be used to cover the Purple Loosestrife Control Program. The local port sponsors will submit the permit application 60 days prior to the proposed activity.

An Integrated Pest Management approach will be used with a focus on bio-control of dense stands, with thorough mapping and monitoring to determine the effectiveness of bio-control in this tidal situation. Rodeo, an EPA-registered herbicide approved for over-water application, would be used (wipe on/spot spray) in conjunction with bio-control and mechanical treatments to treat purple loosestrife infestations between Columbia River miles 18-52.

Tidegate Retrofits for Salmonid Passage

Tidegates at Burris Creek and Deep River locations will be retrofitted with more fish-friendly tidegates to allow for easier passage over longer periods of time by salmonids. Where tidegates and associated culverts are dilapidated or otherwise unsuitable, a complete replacement of the tidegate and culvert will occur.

Improved Embayment Circulation

A channel will be excavated through the dredged material formed upland habitat that connects Fisher and Hump Island to increase water flow and circulation to the embayment between these islands and thereby improve juvenile salmonid and other aquatic species habitat and water quality conditions.

Howard-Cottonwood Islands Columbia White-Tailed Deer Introduction

This feature is intended to provide secure habitat for Columbia white-tailed deer. The re-introduction of Columbia white-tailed deer by the USFWS is seen as viable at this location given the presence of large blocks of riparian forest on these islands.

Bachelor Slough Restoration

The primary component of this restoration feature entails the removal of accumulated silts from Bachelor Slough from approximately 300 feet north of the mouth (south tip of Bachelor Island) to the north end of the slough where it merges with Lake River. Restoration of riparian vegetation will occur on approximately 6 acres of the Bachelor Island shoreline abutting Bachelor Slough. The dredged material disposal site(s) associated with this action will also have riparian forest habitat developed on them as part of the restoration feature.

Shillapoo Lake

Water control features will be developed on Shillapoo Lake Wildlife Management Area per coordination with the Washington Department of Fish and Wildlife to develop and manage wetland habitat for wildlife management purposes.

Potential Impacts to Characteristic Uses of the Water Body and Proposed Actions to Avoid, Minimize, and Mitigate Detrimental Impacts, to Fish and Aquatic Life

The Project's potential impacts have been extensively analyzed in the following documents:

USACOE Draft *Supplemental Integrated Feasibility Report for Channel Improvements and Environmental Impact Statement*, dated July 2002 (Draft Supplemental IFR/EIS) – Chapter 6 (Environmental Consequences)

National Marine Fisheries Service *Biological Opinion for the Columbia River Federal Navigation Channel Improvement Project*, dated May 2002 (NMFS BO) – Chapter 6 (Effects of the Proposed Action)

US Fish and Wildlife Service *Biological and Conference Opinions for the Columbia River Channel Improvement Project*, dated May 2002 (USFWS BO) – Chapter 5 (Effects of Action)

USACOE Final *Biological Assessment: Columbia River Channel Improvement Project*, dated December, 2001 (BA) – Chapters 6 and 8 (Effects Analysis and Ecosystem Restoration Features and Research Actions)

USACOE Final *Integrated Feasibility Report for Channel Improvements and Environmental Impact Statement*, dated August 1999 (Final IFR/EIS) – Chapter 6 (Environmental Consequences)

USACOE Final *Integrated Dredged Material Management Plan & Supplemental Environmental Impact Statement*, dated June, 1998 (DMMP/SEIS) – Chapter 4 (Environmental Consequences)

These documents have all been provided to Ecology.

Anticipated environmental impacts from the proposed action are summarized in attached Table 2, in comparison to potential impacts from the no-action alternative and the least cost disposal alternative.

Proposed actions to avoid, minimize, and mitigate detrimental impacts, and provide proper protection of fish and aquatic life include: minimization and best management practices included in the authorized project; mitigation included in the authorized project; and the mandatory terms and conditions of the NMFS and USFWS Biological Opinions. Minimization and best management practices for dredging and disposal are summarized in attached Tables 3 and 4. The mitigation plan for wetland impacts can be found at the Draft Wetland Mitigation Plan, Exhibit K in the Draft Supplement EIS, and Technical Memorandum Consistency with Local Critical Area Ordinances. The mandatory terms and conditions from the NMFS BO and USFWS BO are provided in Attachment B. Wildlife mitigation efforts are detailed in Appendix G, 1999, FIFR/EIS.

Construction Staging

Construction of the project will be performed under several contracts: pipeline dredging, hopper dredging, rock removal, mitigation, and restoration contracts. The restoration and mitigation work would likely commence first, followed by the dredging and disposal. Dredging would begin in the Lower River and work upriver towards the Portland/Vancouver area. Due to the specialized nature of rock blasting, this work will be awarded in one contract and will occur during the approved in-water work window (November through February), to be protective of ESA aquatic species.

Construction is expected to take 2 years. Maintenance will occur annually. Construction is anticipated to begin in February 2004 with some of the ecosystem restoration features, followed by the construction of the mitigation sites. Shillapoo Lake, Tenasillahe interim, tide gate retrofits, improved embayment circulation and translocation of Columbian White Tailed Deer, and Bachelor Slough would be constructed in 2004. The purple loose strife control is a five-year

effort beginning in 2004. Dredging is anticipated to begin in July 2004 and last for 24 months. Lois Island would be constructed beginning in November 2004 and be completed with construction material in June 2006. Some of the pile dikes for the Miller-Pillar restoration would be driven during construction.

Temporary and Permanent Structures

The only structures that will be placed waterward of the ordinary high water mark are structures required for handling of return water from upland disposal sites. These structures are generally pipes, some of which may be permanent.

Fill Material to be Placed

Construction and 20 years of maintenance will result in approximately 110 million cubic yards (mcy) of sands dredged from the Columbia River channel being disposed in a combination of locations: flowlane, sumps, shoreline and upland disposal sites. In addition, 50,000 cy of basalt will be removed at Warrior Rock near St. Helens, (RM 88) by blasting. 440,000 cy of cemented cobbles will be removed at Longview by mechanical dredge. The basalt and the cemented cobbles will be disposed at upland locations.

Discharges within or along the waters of the Columbia River include disposal actions, ecosystem restoration and mitigation. Flowlane disposal is projected for both construction and maintenance of the channel. During construction, restoration fills include approximately 6 mcy at Lois Island; and during maintenance, 6 mcy at Miller-Pillar, in Oregon. Up to 1 mcy, if available, will be used to fill the artificial embayment and create freshwater intertidal marsh at the Martin Island embayment (located at RM 80) mitigation site in Washington. With the use and implementation of the two estuarine restoration sites, the placement of dredge material at the Deep Water Site would not be necessary. In the event dredge material from the channel was disposed in the ocean, it would be in accordance with the management and monitoring plan that would be developed for a site that would be designated for ocean disposal under Section 102 of the Ocean Dumping Act (ODA). At this point in time, we fully anticipate the site designated under Section 102 to be the "Deep Water Site."

Material to be Placed in Wetlands

Dredged material will be discharged for disposal purposes into 16.1 acres in Washington (10.7 acres at Mt. Solo disposal site, and 5.4 acres at Puget Island).

Delineation report. An interagency wildlife mitigation team consisting of the Corps, Ecology, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and the Oregon Department of Fish and Wildlife prepared a functional analysis of upland disposal impacts, including wetland impacts. The team selected the Habitat Evaluation Procedures (HEP), a U.S. Fish and Wildlife Service program, as the analytical means to assess project-related impacts and mitigation attainment levels.

Wetland impacts are analyzed in the Technical Memorandum entitled *Wildlife and Wetland*

Mitigation for the Columbia River Channel Improvement Project, which is included in Appendix K to the Draft Supplemental IFR/EIS. Additional information on the Mt. Solo and Puget Island wetlands is contained in Attachment B (of the Supplemental IFR/EIS) the *Draft Wetland Mitigation Plan*.

Type and composition of dredged material. The dredged material consists of 99+% alluvial sand and <1% fines (silt, clay, organics).

Material source. Columbia River Federal Navigation Channel

Soil Series (type of soil) located at the wetland site. Puget Island wetland soils are mapped as Cathlamet series (silty loam); Mt. Solo wetland soils are mapped as Caples (silty clay loam) and Snohomish series (silty clay loam), both of which are classified as hydric soils. However, function as hydric soils at Mt. Solo is compromised by current water management at the site (drainage ditches and pumps).

Flooding or draining of wetlands. Storm water runoff from the wetland disposal sites is anticipated to be negligible. The material placed on these disposal sites is medium to coarse grain sands and is extremely porous. Rainwater is expected to percolate into the sandy dredged material evenly during the heaviest precipitation events. No surface runoff is expected. Some minor, temporary ponding may occur in front of the outlet weirs where minor quantities of silts contained in the deposited sand tend to collect.

Wildlife Mitigation Sites: No storm water runoff in excess of the existing condition is anticipated at the Martin Island, Washington mitigation site. Mitigation development at this location will primarily be tillage to expose mineral soil to develop native riparian forest stands. Tree seedlings and grass/herbaceous plant development will be adequate to protect the soil from erosion associated with rainfall events within a few months after initial development. Precipitation is anticipated to percolate into the soil with a negligible amount of runoff.

The Woodland Bottoms, Washington mitigation site is currently protected from flooding via a flood control levee. Internal drainage ditches channel the water to a pump station operated by the diking district to exhaust internally collected waters. Similarly, Burriss Creek flows through the diking district between levees that direct the stream's waters to the district's pumping station. Mitigation efforts would result in construction of a levee within the site to provide a comparable level of flood protection as currently provided by the Burriss Creek levees. The Burriss Creek levees would be removed at least in part. Thus, storm waters from internal drainage and Burriss Creek would be allowed to flow relatively unimpeded across the mitigation lands, and for the wetland units, allowed to stand for substantially longer periods than currently afforded by the diking districts drainage efforts. Excess waters would be directed through the Burriss Creek tidegate or through an overflow weir to the existing pump station operated by the diking district.

Dredging Required in Water

Volume/Area. During the two-year construction period approximately 15 mcy of sand, 440,000 cubic yards of cemented cobbles and 50,500 cubic yards of basalt will be dredged to construct the new channel. In addition, approximately 90 mcy of river sand would be dredged during the

first 20 years of channel maintenance. About 50 mcy of that material will be placed in-water at flowlane, shoreline, and in-water fill sites. The remaining approximately 60 mcy would be placed at upland disposal sites (includes two wetland sites).

Estimated dredging volume for 20 years of post-construction maintenance dredging is 90 mcy

Composition of material to be removed. The majority of materials to be dredged is 99+% alluvial sand and <1% fines (silt, clay, organics). A small amount (<.5mcy) of dredging of cemented cobbles and basalt will also occur during construction. Materials to be dredged are suitable for unconfined in-water and upland disposal. Detailed sediment quality analyses are provided in Appendix B to the Final IFR/EIS (*Columbia and Willamette River Sediment Quality Evaluation*), Appendix B to the BA (*An Assessment of Potential Risks Posed by PAHs, PCBs and DDT in Dredged Material to Juvenile Salmonids in the Lower Columbia River: Mouth to Bonneville Dam*), and in Appendix H to the Draft Supplemental IFR/EIS (*April 22, 2002 Amendment to Biological Assessment*).

Disposal of dredged materials.

- Shoreline Disposal. Shoreline disposal is proposed for one site in Washington – Skamokawa beach (RM 33.4), which was approved as suitable for such activities by the National Marine Fisheries Service and has previously been used for shoreline disposal. There are no existing vegetated shoreline areas downstream from Skamokawa beach.
- Flowlane disposal. Flowlane disposal would occur throughout the project in a manner similar to that occurring for maintenance dredging.
- Sumps. Material is temporarily placed in the Harrington sump when river conditions or equipment availability does not allow direct placement of material on Rice Island. Pipeline dredges later remove the material from Harrington Sump and place it upland for permanent disposal.

The Tongue Point Sump is to be used during construction to temporarily store disposal material that will ultimately be placed on the Lois Island ecosystem restoration site by a pipeline dredge.

- Wetland Disposal. See section Q above.
- Mitigation. See section Q above.
- Ocean. With the implementation of these two estuarine restoration sites, the placement of dredge material in the ocean would not be necessary. In the event dredge material from the channel did go to the ocean it would be discharged into a site designated under Section 102 of the Ocean Dumping Act. Such discharge would be in accordance with the management and monitoring plan as required by the Ocean Dumping Act. At this point in time, we fully anticipate that the Deep Water Site would be the site designated under Section 102.

Method of dredging. Dredging will be performed using pipeline dredging, hopper dredging and mechanical dredging (clamshell, dragline and backhoe). The typical dredge operation of a pipeline dredge and disposal activity consists of the use of a non-self propelled, steel hull, cutter-head type dredge. The dredge uses one cutter head at the end of a 33 inch suction pipe for dredging. The discharge pipeline is 30 inches in diameter. The dredge is towed to its initial position and anchored by retractable spuds on the stern and swing anchors on the bow. Once on station the discharge pipeline (mounted on pontoons) is attached. Pipeline length varies from 1,500 to 20,000 feet depending on disposal location and method. Once the pipeline is connected, the dredge's five-bladed cutter head, mounted on a lattice frame (ladder), is lowered to the river bottom. While digging, the cutter, rotating at 24 R.P. M. loosens up sediment, allowing it to be pumped with water (in a slurry form) to the disposal site.

Prior to pumping material into an upland disposal site, the site is prepared by pushing up what is known as a training dike around the perimeter of the site using large dozers. These dikes are usually about 4-5 feet high and are created from material that exists at the site. As the slurry enters the disposal site, the sediment is pushed up toward the perimeter dike and its elevation is increased. This continues throughout the disposal operation.

The slurry exits the discharge pipe into one side of the disposal site, then the sediment settles out as the water flows across the site and returns to the river through a weir at the other side of the disposal site. The weir is an L-shaped pipe with a semi-circular, vertical piece and a horizontal pipe. Water spills over the flat face of the vertical half-pipe down into the horizontal pipe, which carries the water back to the river. As the sediment builds up in the site, boards are added to the face of the vertical pipe to allow water to continue to flow back to the river while preventing sediment from leaving the site. To improve the quality of the return water and reduce turbidity, settling ponds or cross dikes can be constructed to increase the length of time for settling of the sediment before water leaves the site. Since the sediments dredged from the Columbia River are 99-100% sand, there is minimal, localized turbidity where water returns to the river from the disposal site.

Limited drilling and blasting will also be required in certain areas during construction for removal of basalt.

Dredging activities are described in detail in the Final IFR/EIS at Section 2.4 and in the BA at Chapter 3. Table 3 details minimization and best management practices for dredging that are included in the Project. Attachment B contains mandatory terms and conditions from the ESA consultation for dredging activities.

State Environmental Policy Act (SEPA)

The Washington Port Sponsors are participating with the Corps of Engineers in the preparation of a Supplemental Integrated Feasibility Report/Environmental Impact Statement. The Port of Longview is serving as nominal co-lead agency. The Corps and Ports issued a draft Supplemental IFR/EIS on July 12, 2002. A final Supplemental IFR/EIS is scheduled for release in December 2002.

Names and Addresses of Immediately Adjacent Property Owners

The States of Oregon and Washington own the riverbed immediately adjacent to the areas proposed for dredging and in-water disposal. Notification should occur through the Department of State Lands (Oregon) and the Department of Natural Resources (Washington). The complete mailing list generated for this project, over the past ten years is listed in Attachment A (this attachment was sent with the draft application). We believe this list to include all affected property owners and interested parties within the project area. Property owners immediately adjacent to the dredging activities are ODSL and WDNR. Property owners potentially affected by material placement at upland disposal locations are also included.

**List of Attachments, Figures and Tables for
WASHINGTON 401 CERTIFICATION APPLICATION**

Attachments

Attachment A: A CD of names and addresses of owners of upland disposal, mitigation and ecosystem restoration sites (previously provided)

Attachment B: Mandatory Terms and Conditions from NMFS and USFWS Biological Opinions

Figures

Figures 1-8: Location of project activities (dredging, disposal, mitigation and ecosystem restoration)

Tables

Table 1: Upland disposal and mitigation sites

Table 2: Summary of environmental impacts

Tables 3: Minimization practices and Best Management practices for dredging

Tables 4: Minimization practices and Best Management practices for disposal