Request for Clean Water Act
Section 401 Water Quality Certification
Washington State Department of Ecology
Phone: (360) 407-6076 or E-mail: ecyrefedpermits@ecy.wa.gov

AGENCY USE ONLY
Date Received: 9/1/2023
Aquatics ID No.: 142754
Team: HQ
Valid Request: 9/1/2023

This Section 401 Water Quality Certification (WQC) Request form identifies information needed in order to review and process a Section 401 WQC Request. Please see Department of Ecology's (Ecology) webpage for more information about the Section 401 WQC Request process.

Submit this Section 401 WQC Request form along with a Joint Aquatic Resources Permit Application (JARPA) and supporting information[1] to ecyrefedpermits@ecy.wa.gov and copy the federal permitting agency.

A. Federal Permit or License Reference Number, if known: N/A

Department of Ecology (Ecology) Aquatics ID Number, if known: 142754

Project Name: Lower Columbia River Anchorage Dredging **County:** Cowlitz & Clark

B. Project Proponent Name: U.S. Army Corps of Engineers

C. Documentation showing that the Pre-Filing Meeting Request was submitted at least 30 days prior to submitting this Section 401 WQC Request. Attach either of the following:

- ■ E-mail acknowledgement of receipt from Ecology
- ☐ Copy of previously submitted Pre-Filing Meeting Request Form

D. A completed, signed, and dated JARPA should be submitted with this form.

Did you attach a JARPA? ■ Yes ☐ No

E. The following is a list of documents needed for Ecology's WQC review, along with a brief explanation. Depending on the project, additional information may be requested.

Please let us know what information you are submitting with this WQC request form.

Required for all projects:

1. State Environmental Policy Act (SEPA) determination and/or checklist:
   - ☐ Final SEPA determination attached
   - ☐ SEPA determination pending
   - ☐ Exempt from SEPA (see SEPA Guidance)
   - ■ SEPA is not required (e.g., federal agency projects)

[1] To submit documents over 25MB, e-mail ecyrefedpermits@ecy.wa.gov to request a secure link.

To request an ADA accommodation, contact Ecology by phone at (360) 407-6076 or email at ecyrefedpermits@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility.
For Relay Service or TTY call 711 or 877-833-6341.

Si necesita este formulario en español, por favor, llámenos a (360) 407-6076
o envíenos un correo electrónico a: ecyrefedpermits@ecy.wa.gov

2. Project drawings attached:
   - ☒ Vicinity map
   - ☒ Plan view
   - ☐ Cross-section(s)
   - ☐ Plan set
   - ☐ Other:_____

3. Best management practices and construction methodology, provided in the attached:
   - ☒ JARPA
   - ☐ Water Quality Monitoring and Protection Plan (WQMPP)
   - ☐ Project drawings, sheets:_____
   - ☐ Mitigation Plan pages:_____
   - ☒ Other document(s): WQMP & BMPs

   Notes:
   - This is needed for in-water work (below ordinary high water mark), including wetlands.
   - Describe best management practices to be implemented to protect water quality.
   - Describe construction sequencing and methodology.

4. Water quality monitoring, provided in the attached:
   - ☒ Water Quality Monitoring Plan (WQMP).
   - ☐ Water Quality Monitoring and Protection Plan (WQMPP is similar to WQMP, but includes best management practices).
   - ☐ Other (please identify location, such as JARPA, Part 8):_____

   Notes:
   - Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
   - A plan is needed when conducting work in a waterbody (e.g., creek, ditch, river, lake, pond, marine, estuarine).
   - Include water quality parameters such as turbidity, oil sheen, pH (e.g., poured in-place concrete, concrete demolition), etc.
   - See State Water Quality Standards for Surface Waters (Chapter 173-201A-200 or -210 WAC)
   - If needed, templates are available.

Required depending on the project type:

5. Erosion and sediment control for upland work (above ordinary high water mark) that addresses stormwater during construction and long-term:

   This information is included in the attached:
   - ☐ JARPA
   - ☐ Project drawings, sheets:_____
   - ☐ Stormwater Pollution Prevention Plan, pages:_____
   - ☐ Mitigation Plan, pages:_____
   - ☐ Other document(s): _____

6. Wetland report, including the attached:
   - ☐ Wetland delineation report
   - ☐ Delineation data sheets
   - ☐ Wetland rating forms

Notes:

- Needed when there is a discharge (dewatering, excavation or fill) to wetlands.
- Report needs to include both a wetland delineation and rating.
- Include delineation data sheets and rating forms.
- For more information see wetland delineation resources and hiring a qualified wetland professional.
- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.

7. Mitigation, avoidance and minimization
   - ☐ Wetland avoidance and minimization checklist
   - ☐ Other aquatic resource avoidance and minimization demonstration
   - ☐ Mitigation Plan
   - ☐ Other:_____

   Notes:
   - Wetland avoidance and minimization webpage.

8. Mitigation plan, provided in the attached:
   - ☐ Riparian Planting and Monitoring Plan (Needed when riparian vegetation is removed or modified)
   - ☐ Wetland or stream/other aquatic resource Mitigation Plan
   - ☐ Wetland Mitigation Bank Use Plan (use when proposing mitigation bank use)
   - ☐ In-Lieu Fee (ILF) Use Plan (use when proposing ILF mitigation)
   - ☐ Project drawings, sheets:_____
   - ☐ Other:_____

   Notes:
   - Needed to offset impacts to wetland, stream, marine, or other aquatic habitat.
   - Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
   - For more information, see wetland compensatory mitigation.

9. Dredging
   - ☒ Dredging Plan attached
   - ☒ Suitability Determination attached

   Notes:
   - Needed when sediments will be dredged for maintenance, navigation, or other purposes.
   - Covers in-water disposal and sediment anti-degradation.
   - Dredging Plan should include dredge footprint and depth, dredge type, best management. practices, disposal plan, off-loading plan for upland disposal, etc.
   - Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
   - For informationon suitability determinations, see Dredged Material Management Office.

10. Dewatering
    - ☐ Dewatering Plan attached

    Notes:
    - Needed for complex in-water work or management of excavated/dredged material.

- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
- May also be required for some excavation projects.

F. Required Certification Statements:

The project proponent hereby certifies that all information contained herein is true, accurate, and complete, to the best of my knowledge and belief.

Initial DB

The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Initial DB

Signature: BRADFORD.DARREN.LEE.1618666871 Digitally signed by BRADFORD.DARREN.LEE.1618666871 Date: 2023.09.01 11:41:53 -07'00' Date: 1 September 2023

Print Name: Darren Bradford

WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form[1,2] [help]

US Army Corps of Engineers ®
Seattle District

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.

AGENCY USE ONLY

Date received: 9/1/2023 edoc Rec'd Section 401 Request Form

Agency reference #: _____

Tax Parcel #(s): _____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
Lower Columbia River Anchorage Dredging

Part 2–Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Middle)			
Gibbons, Amy			
2b. Organization (If applicable)			
United States Army Corps of Engineers (Corps), Portland District			
2c. Mailing Address (Street or PO Box)			
PO Box 2946			
2d. City, State, Zip			
Portland, OR 97204			
2e. Phone (1)	**2f.** Phone (2)	**2g.** Fax	**2h.** E-mail
503-808-4389			Amy.C.Gibbons@usace.army.mil

[1]Additional forms may be required for the following permits:
- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

[2]To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias__resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.

Part 3–Authorized Agent or Contact

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

3a. Name (Last, First, Middle)			
Bradford, Darren			
3b. Organization (If applicable)			
Corps, Portland District			
3c. Mailing Address (Street or PO Box)			
PO Box 2946 / 333 SW 1st Avenue – CENWP-PM-E			
3d. City, State, Zip			
Portland, OR 97208-2946			
3e. Phone (1)	**3f.** Phone (2)	**3g.** Fax	**3h.** E-mail
503-808-4663			Darren.L.Bradford@usace.army.mil

Part 4–Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [help]

☐ Same as applicant. (Skip to Part 5.)

☐ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☐ There are multiple upland property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.

☒ Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete JARPA Attachment E to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
All dredging and dredged material placement will occur in-water in the Columbia River.			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4d. City, State, Zip			
4e. Phone (1)	**4f.** Phone (2)	**4g.** Fax	**4h.** E-mail

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

☒ There are multiple project locations (e.g. linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]

☐ Private

☐ Federal

☐ Publicly owned (state, county, city, special districts like schools, ports, etc.)

☐ Tribal

☒ Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)

5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]

All dredging and dredged material placement will occur in-water in the Columbia River. The seven U.S. Coast Guard (USCG)-designated anchorage grounds and Corps Civil Works program anchorages are located in the Columbia River, adjacent to the federal navigation channel (FNC), from River Mile (RM) 14 to 105. Four of the anchorages are located within Washington State, from RM 64 to 105. See Attachment 1. All dredge materials from the anchorages would be placed in water at sites deeper than 20 feet in Oregon or Washington at locations already used by the Corps for maintenance of the FNCs.

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]

Anchorages within Washington State are located near Longview, WA and Vancouver, WA. See Attachment 1

5d. County [help]

Cowlitz & Clark

5e. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range

5f. Provide the latitude and longitude of the project location. [help]

- Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

See Attachment 1

5g. List the tax parcel number(s) for the project location. [help]

- The local county assessor's office can provide this information.

N/A

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

Name	Mailing Address	Tax Parcel # (if known)
N/A		

5i. List all wetlands on or adjacent to the project location. [help]

N/A. The action is located in the Columbia River and is entirely in water.

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

Columbia River

5k. Is any part of the project area within a 100-year floodplain? [help]

☒ Yes ☐ No ☐ Don't know

5l. Briefly describe the vegetation and habitat conditions on the property. [help]

Biological resources within the Columba River system are diverse. There is a wide range of aquatic, terrestrial, and avian species that utilize one or more types of habitat found within the project area. The proposed action is located in areas that are deeper than 20 feet with relatively higher river flow velocities, with naturally unstable or shifting substrate and low light penetration. These areas do not support aquatic vegetation and lower benthic productivity is expected at these depths. There have been multiple studies to support the conclusion that benthic densities are significantly lower in areas deeper than 20 feet and that benthic primary production consists of shallower, subtidal and intertidal habitats. For example, the study "In-water restoration between Miller Sands and Pillar Rock Island, Columbia River: Environmental surveys, 1992-93" by Hinton, S.A., G.T. McCabe, Jr., and R.L. Emmett, 1995. Organisms common to areas of unstable substrates are adapted to physically stressful conditions and have life cycles that allow them to withstand the stresses of disturbance. At these placement sites where velocities are high in areas that are deeper than 20 feet, fish may migrate but would avoid any dredge activity. Any juvenile fish in the general vicinity would be closer to the shoreline. Large ships are already present in the USCG-designated anchorages and in-water placement sites are already used routinely for LCR FNC O&M. The quality of the affected fish and wildlife habitat is low in the areas where dredging and placement occur.

Sediments to be dredged are evaluated to determine if they are suitable for in-water placement according to the requirements of the CWA and Marine Protection Reserve and Sanctuaries Act (MPRSA). The Corps began collection sediment quality data from its projects in the 1970s. These data are available at https://www.nwp.usace.army.mil/Missions/Environmental-Stewardship/DMM. The Corps Portland District uses the most recent 2018 version of the Sediment Evaluation Framework (SEF) for the Pacific Northwest to ensure that civil works projects and the projects permitted by the Regulatory Program comply with the CWA and MPRSA. The SEF aids federal and state agencies in Washington, Oregon, and Idaho in evaluating the suitability of dredged material for unconfined, aquatic placement in inland waters and disposal in ocean waters. It is periodically updated to incorporate the latest technical and scientific advances and incorporate changes in regional policy.

In 2016, the Corps performed a comprehensive survey of the grain size distribution in the LCR federal navigation project, from RM 3 to 106.5. A total of 26 sediment samples from the 2016 sediment sampling event are located in or adjacent to the seven anchorage areas. Sediments in the anchorages are primarily comprised of sand (22.3% to 99.9%) and gravel (<1% to 71.8%); the fines (silt and clay) fraction ranged from <1% to 5.9%. None of the anchorages are in close proximity to known land-based sources of contamination. Based on the existing data, in accordance with the SEF, on June 25, 2023, the PSET issued a positive dredged material suitability determination for the anchorages, stating that the anchorage areas do not require additional sediment physical or chemical evaluation per the SEF until March 2026, which aligns with the recency of the data collected by the Corps for the LCR FNC. The dredged material suitability determination is included as Attachment 2. The Corps will continue to sample and evaluate sediment to be dredged periodically in the future in accordance with the SEF. Dredged material would only be placed in water after the PSET determines that project sediments are suitable for unconfined, aquatic placement.

5m. Describe how the property is currently used. [help]

The USCG-designated anchorage grounds are intended for the primary use of deep-draft vessels over 200 feet in length, to drop their anchors, release chains, and come to rest facing into the river current. All dredge materials from the anchorages would be placed in water at sites deeper than 20 feet in Oregon or Washington at locations already used by the Corps for maintenance of the FNCs.

The Corps has been responsible for maintaining navigation channels in the Columbia River since the late 1800s. The agency has accomplished this task through regular dredging of the main channel between the mouth of the Columbia River and Bonneville Dam (RM -3 to RM 145), multiple side channels and the Portland/Vancouver anchorages and places dredged material in upland and shoreline sites and in water in the Columbia River in areas deeper than 20 feet in accordance with existing 401 Water Quality Certification Order No. 19402 for Columbia River Federal Navigation Channel Ongoing Operations and Maintenance Dredging in Pacific, Wahkiakum, Cowlitz, Clark and Skamania Counties, Washington. The Columbia River is a dynamic environment of sediment movement, where bed-load material often forms moving sand-wave ripples along the river bottom. Locations for in-water placement vary, depending on the depth of the river bottom each year, to avoid excessive shoaling and other adverse hydraulic effects. As deeper areas in the river are filled with dredged material over time, new deep areas are formed elsewhere through natural river processes.

5n. Describe how the adjacent properties are currently used. [help]

The FNC adjacent to the USCG-designated anchorage grounds operates together with the anchorages as a system for ships to efficiently move commerce up and down the Columbia River. This system provides reliable navigation for global imports and exports. See Project Purpose and Need section for economic benefits. More than 12,000 commercial vessels and 100,000 recreational/charter vessels navigate through the deep-draft navigation channel each year. According to the Pacific Northwest Waterways Association, more than 40,000 jobs along the lower Columbia River are directly dependent on seaport activity.

The Columbia River supports treaty, non-treaty commercial, and recreational fisheries. These fisheries are highly regulated by state, federal, and tribal entities. A wide range of fish and aquatic species are harvested from the Columbia River. There are 13 ESA-listed Evolutionary Significant Unit (ESU) salmon that migrate into the Columbia River system. Additionally, five other ESA-listed fish species use the Columbia River system in some capacity. Overall, there are over 120 species of fish and aquatic species that are harvested from this region. The Columbia River supports a $410 million dollar fishery industry (salmon, crab, groundfish, etc.). (USFWS, 2006)

(http://www.fws.gov/gorgefish/carson/reports/MA%20Fact%20Sheet%203_3_06.pdf)

In addition to supporting commercial fishing and related industries, the river is also used by recreationalists, mostly in a day-use capacity. Recreational use of the Columbia River occurs year-round; river-based tourism and recreational activities are the driving economic force for a lot of the towns situated along the Columbia River. Fishing, hunting, swimming, water sports, and sightseeing are among the most popular activities to engage in with the Columbia River.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]

There are no known permanent structures located within the boundaries of the dredging or placement areas. Section 107 of the Rivers and Harbors Act of 1960, as amended, provides authority for the Corps to implement small navigation improvement projects to ensure safe and efficient use of the nation’s navigable waterways. Under this authority, the Corps maintains eight stern mooring buoys within USCG-designated anchorage grounds for the use of commercial vessels transiting the LCR FNC. Stern mooring buoys improve navigation safety by allowing a ship to anchor at both ends, so it will not swing into shallow water toward shore or into the FNC under changing currents and wind directions. The proposed action will not impact the condition or use of the stern mooring buoys. Additional buoys, navigational aids, and pile dikes are scattered throughout the CR and are avoided during dredging and placement activities.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]

From Longview Anchorage: From Kalama, Washington. Follow I-5 N and WA-432 W to 3rd Ave in Longview. Exit from WA-432 W. Take Industrial Way approximately 3.0 miles. Destination is on your left. Cottonwood Anchorage: From Lindbergh, OR: Head southwest toward US-30 W. Turn right onto US-30 W. Turn right onto Edgewater Dr. Destination is straight ahead. Vancouver Lower and Upper Anchorage: From Vancouver, WA: Take Columbia St to W 15th St/Mill Plain Blvd. Turn left onto W 15th St/Mill Plain Blvd. Continue to follow Mill Plain Blvd, Take NW Lower River Rd and NW Gateway Ave. Destination is on your right. In-water dredged material placement occurs throughout the Lower Columbia River. See Attachment 1 maps.

Part 6–Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [help]

The Corps proposes to perform annual dredging to remove shoaling at seven existing, U.S. Coast Guard (USCG)-designated anchorage grounds and Corps Civil Works program anchorages in the Lower Columbia River (LCR). See Attachment 1 maps. Although the Corps historically has not dredged these anchorages, Congress recently, in Section 106 of WRDA 2020, Public Law 116-260, Dec. 27, 2020, 134 Stat. 1182, provided that the Corps may perform dredging at Federal expense within and adjacent to anchorages established by the USCG. The Corps also proposes to continue maintaining the Corps' Civil Works project called the Portland/Vancouver Anchorages which consist of two sites within the USCG-designated Vancouver Upper anchorage ground that are maintained to specific depths with stern mooring buoys. The Portland/Vancouver Anchorage was approved by the Chief of Engineers on 29 October 1993 under the authority of Section 107 of the River and Harbor Act of 1960, as amended.

The seven anchorages are located in the Columbia River, adjacent to the FNC, between RM 14 and 105. Four of the anchorages are located within Washington State, from RM 64 to 105. The Corps proposes to dredge initially to remove accumulated shoaling and then as needed to maintain the required depths. The initial shoal volume within an anchorage may be dredged incrementally over multiple events (years) based on dredge equipment and funding availability. Because sedimentation rates are not currently known, the dredging frequency proposed in Table 1 is informed by the established depth of the anchorage and the shoaling rate and dredging need of the FNC adjacent to each anchorage. The dimensions and acreages represent the estimated shoal area to be dredged based on current dredging need, not the full anchorage dimensions. The depth listed below for each anchorage is the depth that would currently accommodate the most vessels based on site-specific constraints. One additional foot of dredging depth is allowed for allowable overdepth to compensate for physical conditions and inaccuracies in the dredging process. The Portland/Vancouver Anchorages include two additional feet beyond the authorized depth for advanced maintenance and allowable overdepth. Advanced maintenance dredging is required in dynamic shoaling environments to ensure that project dimensions will be maintained until the next dredging event occurs. Advanced maintenance dredging may also be practiced wide of the authorized project dimensions in areas of heavy shoaling. The extra width is dredged on the side of the encroaching shoal and can be as wide as 100 feet. Actual dredging volumes could vary based on changes in shoaling over time, dredging priorities, and available funding. The amount of material to be dredged is the estimated maximum based on existing conditions and includes the volume to advanced maintenance and paid allowable overdepth. The Congressional authorization for the Corps to dredge these USCG-designated anchorage grounds is ongoing into the future unless the USCG retires these anchorages. The Corps is requesting a 10-year water quality certification (WQC) for annual dredging of seven anchorage areas.

The dredged material will be placed in the Columbia River between RM 3 and 106 where water is 20 feet deep or greater in Oregon or Washington in placement areas already approved for maintenance of the LCR FNC (401 Water Quality Certification Order No. 19402 for Columbia River Federal Navigation Channel Ongoing Operations and Maintenance Dredging in Pacific, Wahkiakum, Cowlitz, Clark and Skamania Counties, Washington). The Columbia River is a dynamic environment of sediment movement, where bed-load material often forms moving sand-wave ripples along the river bottom. Locations for in-water placement vary, depending on the depth of the river bottom each year. As deeper areas in the river are filled with dredged material over time, new deep areas are formed elsewhere through natural river processes.

Table 1. Proposed Anchorage Dredging Details.

Area	Columbia River Mile	Dredge Area Dimensions	Amount of Material to be Dredged (maximum)	Dredge Frequency
Astoria North Anchorage (OR)	14 to 17.8, North side of FNC	500 feet wide; 3,000 feet long; 35 feet deep 250 feet wide; 2,000 feet long; 25 feet deep Total est. 46 acres	50,000 CY per event	2 out of every 5 years
Astoria South Anchorage (OR)	15 to 18.2, South side of FNC	1,000 feet wide; 5,400 feet long; 25 feet deep Total est. 124 acres	100,000 CY per event	2 out of every 5 years
Longview Anchorage (WA and OR)	64 to 66, North side of FNC	400 feet wide; 2,000 feet long; 38 feet deep Total est. 19 acres	80,000 CY per event	2 out of every 5 years
Cottonwood Anchorage (WA and OR)	66.7 to 71.6, South side of FNC	Shoals total approx. 500 feet wide; 3,000 feet long; 25 feet deep Total est. 35 acres	40,000 CY per event	2 out of every 5 years
Kalama Anchorage (OR)	73.2 to 76.2, South side of FNC	Shoals total approx. 500 feet wide; 1,900 feet long; 45 feet deep Total est. 22 acres	Initial events 200,000 CY; future events may be less if maintained regularly	Annual
Vancouver Lower Anchorage (WA and OR)	96.2 to 101, North side of FNC	400 feet wide; 2,000 feet long; 28 feet deep 300 feet wide; 3,000 feet long; 30 feet deep 250 feet wide; 2,400 feet long; 45 feet deep Total est. 53 acres	Initial events 200,000 CY; future events may be less if maintained regularly	Annual
Vancouver Upper Anchorage (WA and OR)	102.6 to 105, South side of FNC	Portland/Vancouver Anchorage A: 550 feet wide; 2,000 feet long; 43 feet deep Portland/Vancouver Anchorage B: 550 feet wide; 2,000 feet long; 25 feet deep minimum, but overlaps with area 800 feet wide; 7,000 feet long; 32 feet deep 500 feet wide; 1,800 feet long; 40 feet deep Total est. 200 acres	Initial events 200,000 CY; future events may be less if maintained regularly	Annual

6b. Describe the purpose of the project and why you want or need to perform it. [help]

The Corps proposes to commence annual dredging of seven anchorage areas (i.e., listed in 33 C.F.R. § 110.228(a)(1)–(4), (7), (9), (10)), designated by the USCG. There are four additional designated anchorage areas in the LCR that are not proposed for dredging (33 C.F.R. § 110.228(a)(5), (6), (8), (11)). The purpose of the proposed action is to support waterborne commerce that relies on the LCR FNC and adjacent anchorages. The need for dredging the anchorage grounds is to remove shoals that are restricting their use and to improve safety and efficiency by allowing more ships to anchor inside the river, as opposed to offshore in the ocean. The movement of over 62.4 million tons of cargo valued at nearly $25 billion annually in the Columbia River is a substantial public benefit. It is the largest component of the Columbia–Snake River navigation system which is the top U.S. wheat export and the third largest grain export in the world. The ships

using these anchorages support international exports from at least eleven states in the region. Commercial ships drafting the full authorized channel depth of 43 feet carry approximately 20.5 million tons of export shipments worth nearly $5.6 billion each year. A one-foot vessel draft restriction will disrupt or delay this traffic. Economic losses would increase exponentially with the severity of draft restriction.

While the designated anchorages are intended for the primary use of deep-draft vessels over 200 feet in length, they are used by different vessels drafting a range of depths depending on the individual vessel size and the extent to which it is loaded with goods. The Columbia Bar and River Pilots are charged with safely and efficiently directing the movement of commercial vessels as they arrive from the Pacific Ocean, anchor, shift between berths, and depart. The Corps coordinated with the Columbia Bar and River Pilots based on their usage of the anchorages to determine the highest priority dredging areas.

6c. Indicate the project category. (Check all that apply) [help]

☐ Commercial ☐ Residential ☐ Institutional ☒ Transportation ☐ Recreational

☒ Maintenance ☐ Environmental Enhancement

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

☐ Aquaculture	☐ Culvert	☐ Float	☐ Retaining Wall (upland)
☐ Bank Stabilization	☐ Dam / Weir	☐ Floating Home	☐ Road
☐ Boat House	☐ Dike / Levee / Jetty	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat Launch	☐ Ditch	☐ Land Clearing	☐ Stairs
☐ Boat Lift	☐ Dock / Pier	☐ Marina / Moorage	☐ Stormwater facility
☐ Bridge	☒ Dredging	☐ Mining	☐ Swimming Pool
☐ Bulkhead	☐ Fence	☐ Outfall Structure	☐ Utility Line
☐ Buoy	☐ Ferry Terminal	☐ Piling/Dolphin	
☐ Channel Modification	☐ Fishway	☐ Raft	

☐ Other:

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

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

Maintenance dredging would be performed by using two general types of dredging equipment: mechanical dredges and hydraulic dredges. Mechanical dredging refers to dredging with a clamshell or backhoe. Hydraulic dredging refers to either a hopper dredge or a pipeline dredge.

Mechanical dredges are best suited for material that cannot be removed by hydraulic dredges, such as hard-packed materials, fine-grained sediments, rock, or debris. Because mechanical dredges are not self-propelled and require towboats to move, they are not typically used in high traffic areas. Instead, they are used in tighter spaces around stern anchor buoys, docks, piers, shallow areas and narrow channels where hopper dredges and large pipeline dredges are not able to access.

Hopper dredges are typically self-propelled vessels (ships) that provide flexibility for dredging operations because of their maneuverability (they can quickly move between shoals) and ability to safely operate in higher wind and wave conditions. For these reasons, hopper dredges are most efficient for removal of scattered, small volume sand wave shoals.

Cutter suction pipeline dredges are used most efficiently to remove large cutline shoals where there is a large quantity of material concentrated within a small area. This is because the dredge is not self-propelled and is typically attached to one to two miles of floating pipeline during operation, so a significant effort is involved to move the dredge and pipeline between shoals, including many towboats. Hopper and pipeline dredges currently handle the majority of LCR FNC O&M dredging needs.

The Corps anticipates using any of these types of dredging equipment for the proposed action because the type of equipment to be used is determined by material type, dredge equipment access, equipment availability and least cost, and varies with each location and event. For instance, the initial dredge event may require removal of a large volume of material with debris with a mechanical dredge whereas future maintenance events may consist of small volume sand deposits removed by a hopper dredge. If there is a pipeline dredge working in the adjacent FNC, it may be less cost to use that dredge than to mobilize a different type of dredge from elsewhere.

While both hydraulic and mechanical dredges may be used to maintain these projects, a conservative clamshell dredging production rate of 2,000 CY per day for given estimated dredging volumes was used to estimate the number of dredging days per event. The estimated duration of each event is shown below (days per year).

- Astoria North Anchorage: estimated 25 days
- Astoria South Anchorage: estimated 50 days
- Longview Anchorage: estimated 40 days
- Cottonwood Anchorage: estimated 20 days
- Kalama Anchorage: estimated 100 days
- Vancouver Lower Anchorage: estimated 100 days
- Vancouver Upper Anchorage: estimated 100 days

All work will occur within the Columbia River, within the 100-year floodplain. Dredging and in-water placement moves material within the same river system.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [help]

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

Start Date: June 2024 End Date: Applying for 10-year WQC ☐ See JARPA Attachment D

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

The combined authorized projects' budget is approximately $1M to $10M annually.

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

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

☒ Yes ☐ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

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

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

☒ Not applicable

The action will not impact wetlands or wetland buffers on or adjacent to the project area. The seven anchorages and proposed placement sites are entirely in water in the LCR.

7b. Will the project impact wetlands? [help]

☐ Yes ☒ No ☐ Don't know

7c. Will the project impact wetland buffers? [help]

☐ Yes ☒ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

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

☐ Yes ☒ No

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

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

☐ Yes ☒ No ☐ Don't know

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

- **If Yes**, submit the plan with the JARPA package and answer 7g.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Don't know

N/A

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

N/A

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Activity (fill, drain, excavate, flood, etc.)	Wetland Name[1]	Wetland type and rating category[2]	Impact area (sq. ft. or Acres)	Duration of impact[3]	Proposed mitigation type[4]	Wetland mitigation area (sq. ft. or acres)
N/A						

[1] If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

[2] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.
[3] Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.
[4] Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

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

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

N/A

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

N/A

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

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

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

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

☐ Not applicable

The Corps proposes numerous measures as part of the proposal to minimize impacts to water quality, aquatic species, ESA-listed fish and their habitat, and sediments during dredge activities and dredged material placement, as well as spill control measures that are currently in place for the Columbia River Operations and Maintenance program and that are included as part of this Proposed Action. See Attachment 3.

Sediments to be dredged are evaluated to determine if they are suitable for in-water placement according to the requirements of the CWA. See Attachment 2.

The Corps will only dredge the minimum area necessary to remove shoaling.

All dredged material will be placed in water at sites deeper than 20 feet at locations already used by the Corps for maintenance of the FNCs. Placing the dredged material back into the LCR provides a beneficial use to maintain the river's morphology. The present river morphology acts to stabilize the thalweg and provides for ecological substrate. Over-reliance on upland dredged material placement can negatively affect the LCR morphology and ecology by removing sediment from the system which will destabilize and degrade river bottom depths. Dredged material placement will occur in areas low in benthic productivity and there will be no adverse hydraulic effects, there are no alternative placement sites with less damaging environmental effects, and the biological and physical impacts are minor and temporary in nature.

The project may result in temporary and localized reduction in water quality during the course of dredging and in-water placement, which would suspend sediments in the water column. These impacts would cease after operations are complete. The Corps will monitor turbidity and dissolved oxygen in accordance with the proposed water quality monitoring plan (Attachment 4).

River users would see dredge equipment in use intermittently during the dredge season; however, large ships are already present in USCG-designated anchorages and in-water placement sites are already used routinely for LCR FNC O&M so it is consistent with existing uses. Fish, including ESA-listed salmonids, could be temporarily exposed to noise and visual disturbance above ambient levels. Fish are likely to respond to the presence of dredge equipment by avoiding the dredge area; however, if fish remain, they could become entrained in dredging equipment or be buried during dredge material placement. Few individual fish that encounter the dredging operations will alter their pathway or delay their rate of migration. Juvenile salmonids will largely avoid the dredging and adult fish are intent on moving upstream. Therefore, the project will not significantly change the overall distribution of fish or risk of predation. Salmonid smolts within a couple feet of a hydraulic cutterhead could become entrained, but most would be able to avoid the entrainment. Subyearling salmonids are less able to escape entrainment and are subject to a wider zone of potential entrainment due to less swimming stamina and speed.

The number of subyearling salmonids that will be killed from entrainment cannot be quantified, but the numbers are expected to be low based on BMPs that reduce the chance of fish migrating through the project area during the in-water work window. For all designated salmonid and steel head critical habitats, the project would cause temporary disturbance to the migratory corridor, degradation of water clarity as fine sediments and organic matter are resuspended, and a temporary reduction in quantity of food organisms and benthic productivity. Therefore, effects on critical habitat will be temporary, low magnitude, and not significantly alter critical habitat within the project area. Fish could also be temporarily exposed to elevated levels of turbidity during dredging and in-water placement of dredged material; however, turbidity quickly dissipates because the dredged material is sand and actions typically occur in deeper water, at the river bottom when dredging and at the bottom of the hopper dredge or barge hull during in-water placement. Few if any individual fish will experience a reduction of food or foraging opportunities. Benthic habitat disturbance will be of limited extent and temporary in nature. For all designated salmonid and steelhead critical habitats, the project would cause temporary disturbance from the dredge in the migratory corridor, degradation of water clarity as fine sediments and organic matter are resuspended, and a temporary reduction in quantity of food organisms and benthic productivity. Therefore, effects on critical habitat would be temporary, of low magnitude, and would not significantly alter critical habitat within the project area. Marine mammals could potentially be present in the affected area. Marine mammals are strong swimmers and are anticipated to avoid the affected area, making it very unlikely that the disturbance would rise to the level of harm or harassment. No long-term effects of the proposed action because the quality of the affected fish and wildlife habitat is low in the areas where dredging and placement occur.

In addition to supporting commercial fishing and related industries, the river is also used by recreationalists such as boaters, anglers, and others, mostly in a day-use capacity. Dredging would only occur when there are not conflicts with anchored ships and placement would result in short term, minor effects to boaters because areas of work would be restricted; however, these impacts would be temporary and adjacent areas of the river would still be usable. Dredging to remove shoals from the anchorages would improve navigation for commercial vessels, resulting in economic benefits to Ports, ships, barges, and the businesses and local governments that depend on commercial commerce.

The States of Oregon and Washington have recommended an in-water work window on the Columbia River of November 1 through February 28. The Reasonable and Prudent Measures and Terms and Conditions included in the 2012 NMFS Service BiOp for Operations and Maintenance reflect an in-water work window of June 1 through December 15, or at any time of year if a critical need arises. The proposed in-water work window for anchorages dredging is 1 June to 31 January to coincide with typical Corps Government and contract dredge equipment availability and to allow sufficient time for dredging to occur. Although the Corps endeavors to coordinate with USCG in advance for access to these anchorages, there is the chance that a vessel will be at anchor that prevents dredging. These dates reflect the need for the Corps to be able to begin dredging as soon as possible during the typical, routine dredge season (i.e., June 1 through December 15), to allow enough time to dredge the large volume of material, and to allow additional time to complete the dredging event if there are delays such as adverse weather, high river flows, or equipment breakdowns. This work window allows the Corps to schedule dredging most efficiently based on the shoaling conditions in a given year and minimizes the total number of dredging days required.

The Corps would also include methods for handling hazardous materials spills as part of the proposed action. During any dredging and dredged material placement activity, there is potential for contaminants to enter the water. If a spill occurs, the Corps will follow a Spill Response Plan, a single consolidated document to meet multiple spill-response planning requirements, as identified under the Occupational Safety and Health Administration's Standard, the Resource Conservation and Recovery Act, National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Superfund Amendment and Reauthorization Act, Title III's Emergency Planning and Community Right to Know Act, the Oil Pollution Act, the CWA, and applicable state, local, regional plans for spill response. Implementation of the NCP requires a nationwide network of regional response plans, including the Corps' Spill Response Plan. Operations Project Managers, Dredge Incident Commanders, and emergency-system First Responders use this plan as their primary guidance for responding to oil and hazardous substance spill emergencies in the Portland District.

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

☒ Yes ☐ No

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

- **If Yes**, submit the plan with the JARPA package and answer 8d.
- **If No, or Not applicable,** explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Don't know

A separate mitigation plan is not proposed. All BMPs will be followed. The USCG has already designated these areas through the Federal rulemaking process for the primary use as anchorages for deep draft vessels over 200 feet in length and the Corps' proposed dredging is to remove shoaling so the areas may continue to be used for the designated purpose. In-water placement activities would occur in areas that have been previously used for this purpose. Effects would be temporary and low magnitude within the project area.

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

- If you already completed 7g you do not need to restate your answer here. [help]

N/A

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

Activity (clear, dredge, fill, pile drive, etc.)	**Waterbody name**[1]	**Impact location**[2]	**Duration of impact**[3]	**Amount of material (cubic yards) to be placed in or removed from waterbody**	**Area (sq. ft. or linear ft.) of waterbody directly affected**
Dredging and in-water placement of dredged material	Columbia River	All work within the Columbia River. See Table 1.	Intermittent; maintenance dredging is recurring action and in-water placement areas are dispersive. See Table 1.	720,000/yr maximum*; future events may be less if maintained regularly. Actual dredging volumes may vary based on changes in shoaling over time, dredging priorities, and available funding. *Total volume if all anchorages are dredged in single year (except Astoria anchorages which are entirely within Oregon) *Total in-water placement volume, not broken out by State	~660 acres* *Total acreage if all anchorages are dredged in single year (except Astoria anchorages which are entirely within Oregon) *Acres doubled to represent in-water placement effects, not broken out by State

[1] If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.
[2] Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.
[3] Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

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

See 8g for material source information. Hopper dredges collect material in the hopper of the vessel until it fills to capacity. When filled, the vessel moves to an in-river site. As the dredge is moving, the hopper doors open and the material is discharged at varying rates depending upon how far the hopper doors are opened. The dredge releases the material gradually while moving to avoid mounding. Mechanical dredges collect material into bottom-dump barges pushed or pulled by towboats which place material in the same manner as hopper dredges. In-water discharge from pipeline dredges differs from hoppers in that with a pipeline dredge, material is continuously discharged during dredging operations, whereas hoppers must stop dredging when full and move to another location to discharge material. Pipeline dredge placement of material at in-water sites is done using a down-pipe with a diffuser plate at the end. This downpipe extends 20 feet below the water surface to minimize or avoid impacts to migrating juvenile salmonids.

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

Dredging: Dredging would be performed using two general types of dredging equipment: mechanical dredges and hydraulic dredges. Mechanical dredging refers to dredging with a clamshell or backhoe. Hydraulic dredging refers to either a hopper dredge or a pipeline dredge. See Section 6.e.

Type of material: Sediments in the anchorages are primarily comprised of sand (22.3% to 99.9%) and gravel (<1% to 71.8%); the fines (silt and clay) fraction ranged from <1% to 5.9%. All material is suitable for in water placement. See Attachment 2. See Sections 6.a and 8.e for amount of material that will be dredged and then placed back into the Columbia River, not removed.

Placement of dredged material: The dredged material will be placed in the Columbia River between RM 3 and 106 where water is 20 feet deep or greater in Oregon or Washington in placement areas already approved for maintenance of the LCR FNC (401 Water Quality Certification Order No. 19402 for Columbia River Federal Navigation Channel Ongoing Operations and Maintenance Dredging in Pacific, Wahkiakum, Cowlitz, Clark and Skamania Counties, Washington). The Columbia River is a dynamic environment of sediment movement, where bed-load material often forms moving sand-wave ripples along the river bottom. Locations for in-water placement vary, depending on the depth of the river bottom each year. As deeper areas in the river are filled with dredged material over time, new deep areas are formed elsewhere through natural river processes.

8h. Have you prepared a Water Quality Monitoring Plan (WQMP) for all in-water work (below ordinary high water), over water work or discharges to waters of the state?

☒ Yes ☐ No

If NO describe the monitoring that you will be conducting including parameters, equipment and locations, or explain why monitoring will not be necessary. [help]

See Attachment 4.

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

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

Agency Name	Contact Name	Phone	Most Recent Date of Contact

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

- **If Yes,** list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d.

☒ Yes ☐ No

The Columbia River is listed at some point within the project area for the following parameters: 1,2,4-Trichlorobenzene; 1,2-Dichlorobenzene; 2,3,7,8-Tetrachlorodibenzo-p-Dioxin; 2,3,7,8-Tetrachlorodibenzo-p-Dioxin Toxic Equivalent; 2,4,6-Trichlorophenol; 2,4-Dichlorophenol; 2-Methylnaphthalene; 4,4'- Dichlorodiphenyl dichloroethane; 4,4'- Dichlorodiphenyldichloroethylene; 4,4'- Chlorodiphenyl Trichloroethane; Alpha-BHC; Anthracene; Arsenic; Beta-BHC; Bis(2-chloroisopropyl)ether; Chlordane; Dibenzofuran; Dieldrin; Dioxin; Dissolved Oxygen; Endosulfan I; Endosulfan II ; Endosulfan Sulfate; Endrin; Endrin Aldehyde; Fecal Coliform; Fluoranthene; Fluorene; Gamma-bhc (Lindane); Heptachlor; Heptachlor Epoxide; Hexachlorobenzene; Hexachlorobutadiene; Hexachloroethane; Invasive Exotic Species; Low Molecular Weight Polycyclic Aromatic Hydrocarbons; Mercury, Nitrobenzene; Polychlorinated biphenyl; pH; Phenanthrene; Phenol; Pyrene; Temperature; Total Chlordane; Total Dissolved Gas

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

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

1708000605, 1708000309, 1708000302. See Attachment 1.

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

- Go to https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up to find the WRIA #.

#25 - Grays/Elochoman, #26 - Cowlitz, #27 - Lewis, #28 - Salmon/Washougal

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

- Go to https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria for the standards.

☒ Yes ☐ No ☐ Not applicable

See Attachment 4 for the Corps' proposed water quality monitoring plan.

Dredging must stop if exceedance over background level occurs at second monitoring interval; dredging continues once turbidity levels return to background level. Turbidity would be monitored during dredging and in-water placement operations to ensure that turbidity does not increase above acceptable levels. Turbidity would be monitored by instrument during dredging operations until results ensure that dredging in the anchorages does not cause turbidity to exceed acceptable levels and then would be monitored visually during future dredging events. Turbidity would be monitored visually during in-water placement. Turbidity quickly dissipates because the dredged material is sand and actions typically occur in deeper water, at the river bottom when dredging and at the bottom of the hopper dredge or barge hull during in-water placement. Monitoring by the Corps, both instrument and visual, has shown that turbidity remains within acceptable levels during dredging and in-water placement in the LCR.

Dredging may not occur if DO is less than 6.5 mg/L. More frequent monitoring is required if the DO is below 8 Mg/L. DO would be monitored during dredging operations until results ensure that dredging in the anchorages does not cause DO to decrease below acceptable levels. In the LCR FNC adjacent to the USCG-designated anchorages, the Corps monitored DO during construction to the 43-foot channel depth and DO did not drop below acceptable levels. Monitoring by the Corps has shown that DO has remained at or above acceptable levels during dredging of side channels also.

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

- If you don't know, contact the local planning department.
- For more information, go to: https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases.

☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☒ Other: n/a

9g. What is the Washington Department of Natural Resources Water Type? [help]

- Go to http://www.dnr.wa.gov/forest-practices-water-typing for the Forest Practices Water Typing System.

☐ Shoreline ☒ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]

- **If No**, provide the name of the manual your project is designed to meet.

☒ Yes ☐ No

Ecology's current stormwater manual does not specifically address dredge material placement. However, the BMPs outlined in Attachment 3 of this document are comprehensive and consistent with applicable measures and BMPs included in the manual to protect water quality.

Name of manual: 2019 Stormwater Management Manual for Western Washington (SWMMWW)

9i. Does the project site have known contaminated sediment? [help]

- **If Yes**, please describe below.

☐ Yes ☒ No

9j. If you know what the property was used for in the past, describe below. [help]

The Columbia River has likely been used for waterway travel for hundreds of years but was limited to shallow draft vessels prior to the construction of dams and locks. The construction of the jetties at the mouth of the river in the 1870s jump-started the Columbia River's role in commerce and its subsequent international significance.

Under the Ports and Waterways Safety Act, Public Law 92-340, July 10, 1972, 86 Stat. 424 (46 U.S.C. Chapter 700), the U.S. Coast Guard is authorized to direct the anchoring of vessels, in accordance with 33 C.F.C. § 109.07, in designated anchorage grounds listed in 33 C.F.R. § 110.228, which are intended for the primary use of deep draft vessels over 200 feet in length to drop their anchors, release chains, and come to rest facing into the river current. A portion of the Astoria south anchorage area was first designated on 12 December 1967 (Federal Register Volume 32, No. 239). The Astoria North and South, Longview, Kalama, Lower and Upper Vancouver and other anchorages were designated on 10 December 1987 (Federal Register Volume 52, No. 237). The Cottonwood anchorage was designated on 8 October 2009 (Federal Register Volume 74, No. 194). Over time, anchorages have been modified and expanded to enhance shipping efficiency and economic benefits and to provide sufficient space to accommodate increases in shipping.

All dredge materials from the anchorages would be placed in water at sites deeper than 20 feet at locations already used by the Corps for maintenance of the FNCs.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [help]

- **If Yes**, attach it to your JARPA package.

☒ Yes ☐ No

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

ESA-listed species (NMFS jurisdiction)

Lower Columbia River (LCR) Chinook salmon *(Oncorhynchus tshawytscha)* , Upper Willamette River (UWR) spring-run Chinook salmon, Upper Columbia River (UCR) spring-run Chinook salmon, Snake River (SR) Spring/summer run Chinook salmon, SR fall-run Chinook salmon, Columbia River (CR) chum salmon (O. *keta),* LCR coho salmon (O. *kisutch),* SR sockeye salmon (O. *nerka*), LCR steelhead (O. *mykiss),* UWR steelhead, Middle Columbia River steelhead, UCR steelhead, Snake River Basin steelhead, Southern Distinct Population Segment (DPS) green sturgeon *(Acipenser meditostris),* Pacific eulachon *(Thaleichthys pacificus).*

The Corps has made a no effect determination for ESA-listed species under USFWS jurisdiction (bull trout (*Salvelinus confluentus*)).

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]

Potential habitat affected: Riparian, in-stream

Potential species affected: blue-gray taildropper *(Prophysaon coeruleum), butter clam, (Saxidomus giganteus), native littleneck clam (Protothaca staminea), Pandalid shrimp (Pandalideae spp.), Columbia River tiger beetle (Cicindela columbica), Pacific clubtail (Gomphus kurilis), Chinquapin hairstreak (Habrodais grunus herri), Johnson's hairstreak (Mitoura johnsoni), Queen Charlotte's copper (Lycaena mariposa charlottensis), Marden skipper (Polites mardon), , Pacific lamprey (Entosphenus tridentate), river lamprey (Lampreta ayresi), green sturgeon (Acipenser medirostris), white sturgeon (Acipenser transmontanus), Olympic mudminnow (Novumbra hubbsi), Pacific Herring (Clupea pallasi), leopard dace (Rhinichthys falcatus), mountain sucker (Catostomus platyrhynchus), eulachon (Thaleichthys pacificus), longfin smelt (Spirinchus thaleichthys) surfsmelt (Hypomesus pretiosus), bull trout (Salvelinus confluentus), searun cutthroat (Oncorhynchus clarkii clarkii), pink salmon (Oncorhynchus gorbuscha), Northwestern pond turtle (Actinemys marmorata), , Brandt's cormorant (Phalacrocorax penicillatus), brown pelican (Pelecanus occidentalis), common murre (Uria aalge), eastern breeding populations of grebes, cormorants, and terns, marbled murrelet (Brachyramphus marmoratus), western grebe (Aechmophorus occidentalis), Clark's grebe (Aechmophorus clarkii), western breeding populations of cormorants, storm petrels, terns, and alcids, western non-breeding populations of loons, grebes, cormorants, fulmar, shearwaters, storm-petrels, and alcids, black-crowned night heron (Nycticorax nycticorax), great blue heron (Areda herodias), brant (Branta bernicla), populations of cavity-nesting ducks, harlequin duck (Histrionicus histrionicus), trumpeter swan (Cygnus buccinators), tundra swan (Cygnus columbianus), western non-breeding populations of Barrow's goldeneye, common goldeneye, and bufflehead, bald eagle (Haliaeetus leucocephalus), ferruginous hawk (Buteo regalis), golden eagle (Aquila chrysaetos), northern goshawk (Accipiter gentilis), peregrine falcon (Falco peregrines), prairie falcon (Falco mexicanus), mountain quail (Oreortyx pictus), , sooty grouse (Dendragapus fuliginosus), sandhill crane (Grus canadensis), eastern breeding populations of phalaropes, stilts, and avocets, snowy plover, western non-breeding populations of Charadriidae, Scolopacidae, and Phalaropodidea, band-tailed pigeon (Columba fasciata), yellow-billed cuckoo (Coccyzys americanus), , spotted owl (Strix occidentalis caurina), Vaux's swift (Chaetura vauxi), Lewis's woodpecker (Melanerpes lewis), pileated woodpecker (Dryocopus pileatus), loggerhead shrike (Lanius ludocivianus), purple martin (Progne subis), white-breasted nuthatch (Sitta carolinensis aculeate), streaked horned lark (Eremophila alpestris strigata), Preble's shrew (Sorex preblei), roosting populations of big-brown bat, myotis bats, and pallid bat, Townsend's big- eared bat (Corynorhinus townsendii), gray-tailed vole (Microtus canicaudus), Townsend's ground squirrel (Urocitellus townsendii), western gray squirrel (Scirurus griseus), western pocket gopher (Thomomys mazama), Cascade red fox (Culpes culpes cascadensis), fisher (Martes pennanti), marten (Martes americana), wolverine (Gula gulo), California sea lion (Zalophus californianus), harbor seal (Phoca vitulina), Steller sea lion, Columbia black-tailed deer (Odocoilleus hemionus columbianus), Columbia white-tailed deer, elk (Cervus elaphus), Rocky Mountain mule deer (Odocoileus hemionus hemionus), Manila clam (Tapes philippinarum), Pacific oyster (Crassostrea gigas), chukar (Alectoris chukar), ring-necked pheasant (Phasianus colchicus), and wild turkey (Meleagris gallopavo).*

Part 10–SEPA Compliance and Permits

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

- Online Project Questionnaire at http://apps.oria.wa.gov/opas/.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.
- For a list of addresses to send your JARPA to, click on agency addresses for completed JARPA.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to https://ecology.wa.gov/regulations-permits/SEPA-environmental-review.

☐ A copy of the SEPA determination or letter of exemption is included with this application.

☐ A SEPA determination is pending with _____ (lead agency). The expected decision date is _____.

☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]

☐ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?

_____

☐ Other: _____

☒ SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

☐ Substantial Development ☐ Conditional Use ☐ Variance

☐ Shoreline Exemption Type (explain): _____

Other City/County permits:

☐ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

☐ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption – Attach Exemption Form

Washington Department of Natural Resources:

☐ Aquatic Use Authorization

NOTE to Reviewers – The Corps does not obtain aquatic use authorization for dredging and dredged material placement in the Columbia River. The navigational servitude is the dominant right of the Government under the Commerce Clause of the U.S. Constitution (U.S. Const. Article I, Section 8, Clause 3) to use, control, and regulate the navigable waters of the United States and the submerged lands thereunder for various commerce related purposes including navigation and flood control.

Complete JARPA Attachment E and submit a check for $25 payable to the Washington Department of Natural Resources.

Do not send cash.

Washington Department of Ecology:

☒ Section 401 Water Quality Certification

☐ Authorization to impact waters of the state, including wetlands (Check this box if the proposed impacts are to waters not subject to the federal Clean Water Act)

FEDERAL AND TRIBAL GOVERNMENT

United States Department of the Army (U.S. Army Corps of Engineers):

☐ Section 404 (discharges into waters of the U.S.) ☐ Section 10 (work in navigable waters)

United States Coast Guard:

For projects or bridges over waters of the United States, contact the U.S. Coast Guard at:

☐ Bridge Permit: D13-SMB-D13-BRIDGES@uscg.mil

☐ Private Aids to Navigation (or other non-bridge permits): D13-SMB-D13-PATON@uscg.mil

United States Environmental Protection Agency:

☐ Section 401 Water Quality Certification (discharges into waters of the U.S.) on tribal lands where tribes do not have treatment as a state (TAS)

Tribal Permits: (Check with the tribe to see if there are other tribal permits, e.g., Tribal Environmental Protection Act, Shoreline Permits, Hydraulic Project Permits, or other in addition to CWA Section 401 WQC)

☐ Section 401 Water Quality Certification (discharges into waters of the U.S.) where the tribe has treatment as a state (TAS).

Part 11–Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

11a. Applicant Signature (required) [help]

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

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

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

Amy Gibbons		1 September 2023
Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [help]

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

Darren Bradford		1 September 2023
Authorized Agent Printed Name	Authorized Agent Signature	Date

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

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

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

Property Owner Printed Name	Property Owner Signature	Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 09/2018

Lower Columbia River Anchorages Dredging Project Location Information

Site Name	Site River Miles	Size Acres	City (Nearest)	County	Latitude	Longitude	HUC
Astoria North Anchorage	14 to 17.8	604	Astoria, OR	Clatsop, OR	46°12'29.20"N	123°48'4.70"W	170800060500
Astoria South Anchorage	15 to 18.2	621	Astoria, OR	Clatsop, OR	46°12'19.20"N	123°47'22.89"W	170800060500
Longview Anchorage	64 to 66	265 (~40 OR & ~225 WA)	Rainier, OR & Longview, WA	Columbia, OR & Cowlitz, WA	46° 6'59.43"N	122°58'39.74"W	170800030900
Cottonwood Anchorage	66.7 to 71.6	551 (~496 OR & ~55 WA)	Lindbergh, OR & Longview, WA	Columbia, OR & Cowlitz, WA	46° 4'49.38"N	122°54'11.35"W	170800030900
Kalama Anchorage	73.2 to 76.2	253	Goble, OR & Kalama, WA	Columbia, OR	46° 0'38.10"N	122°51'25.41"W	170800030900
Vancouver Lower Anchorage	96.2 to 101	491 (~5 OR & ~486 WA)	Portland, OR & Vancouver, WA	Multnomah, OR & Clark, WA	45°41'56.98"N	122°46'9.85"W	170800030200
Vancouver Upper Anchorage	102.6 to 105	263 (~250 OR & ~13 WA)	Portland, OR & Vancouver, WA	Multnomah, OR & Clark, WA	45°38'17.02"N	122°43'11.13"W	170800030200

Figure 1. Overview Map of Proposed Anchorage Dredging.

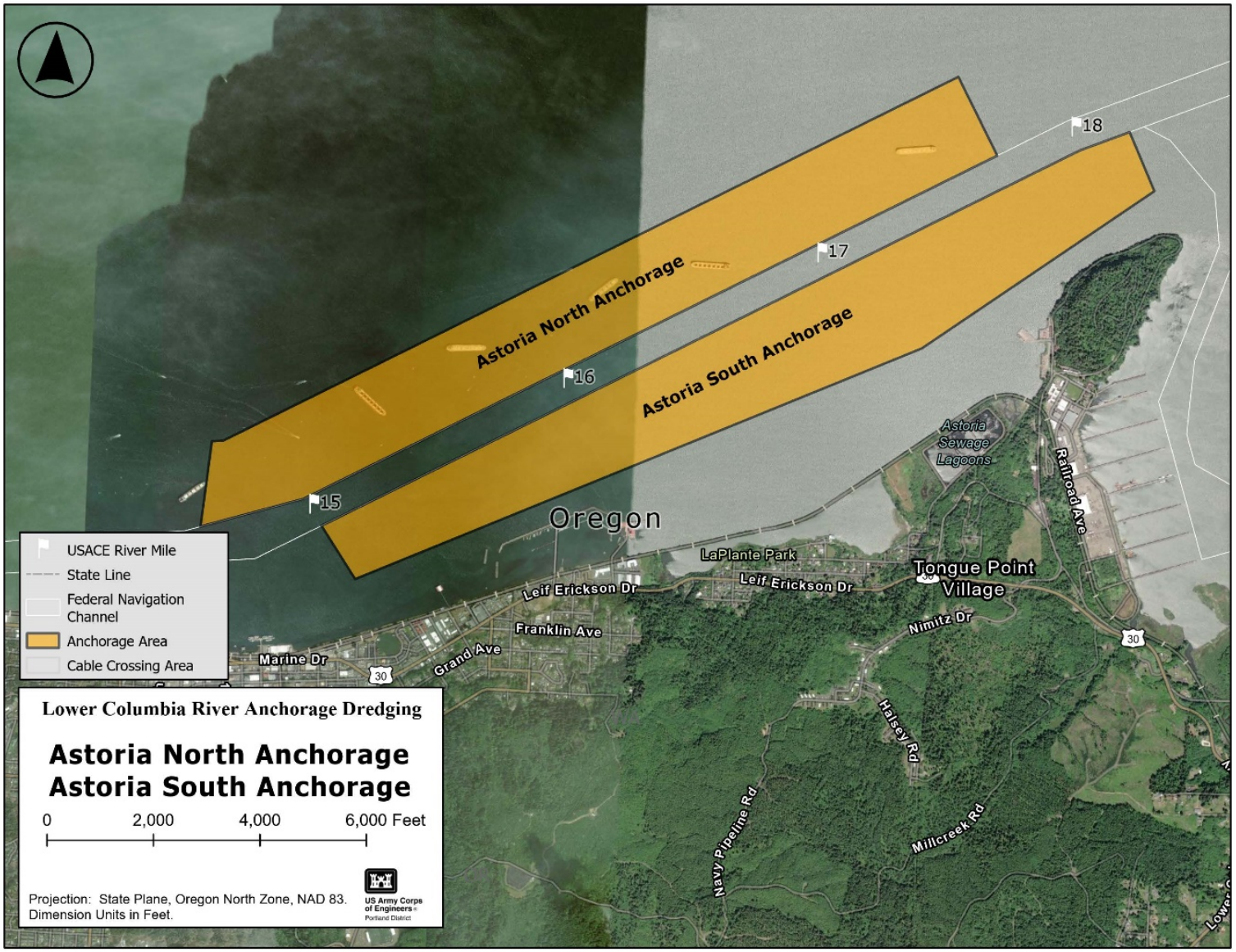


Figure 2. Astoria North and South Anchorages

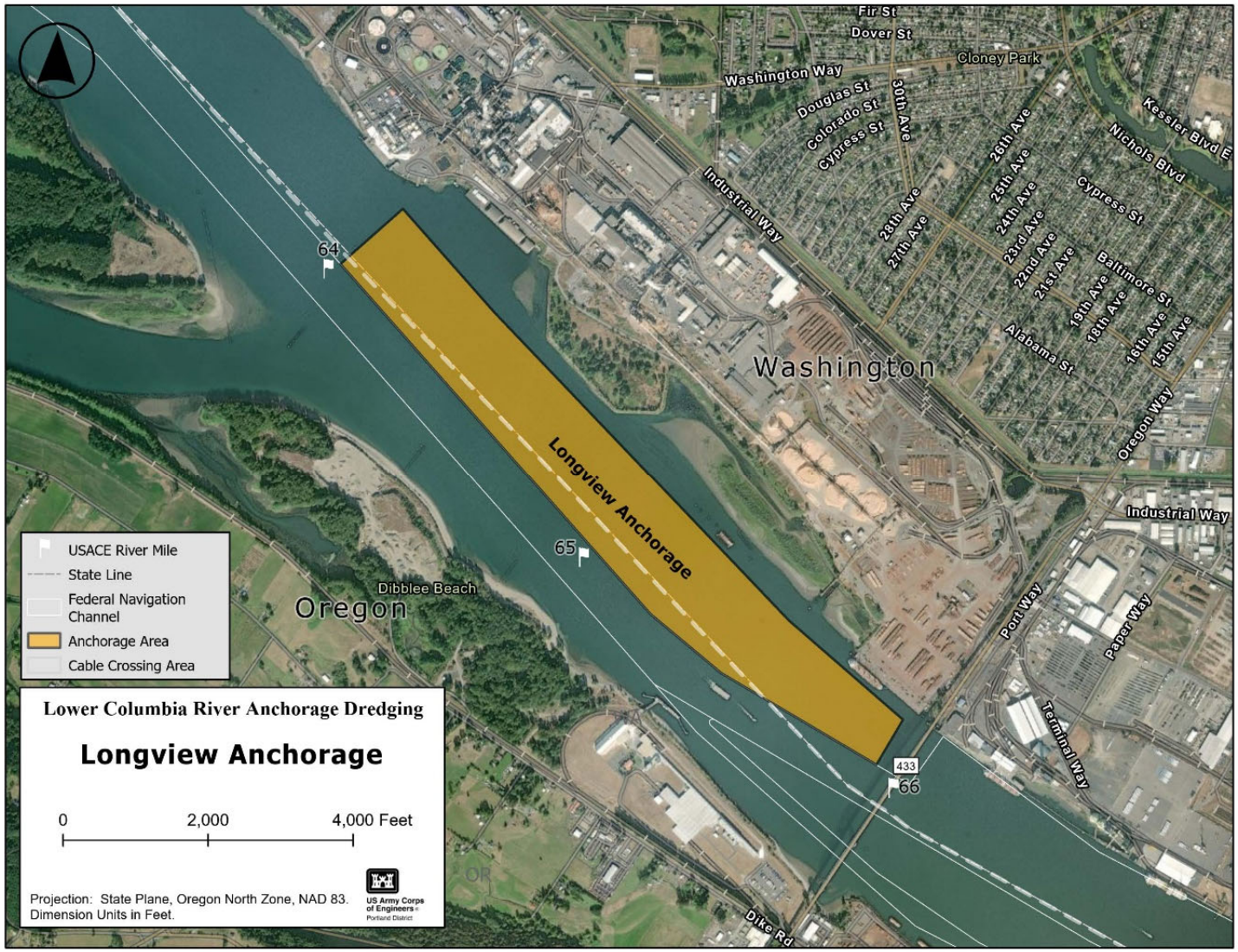


Figure 3. Longview Anchorage

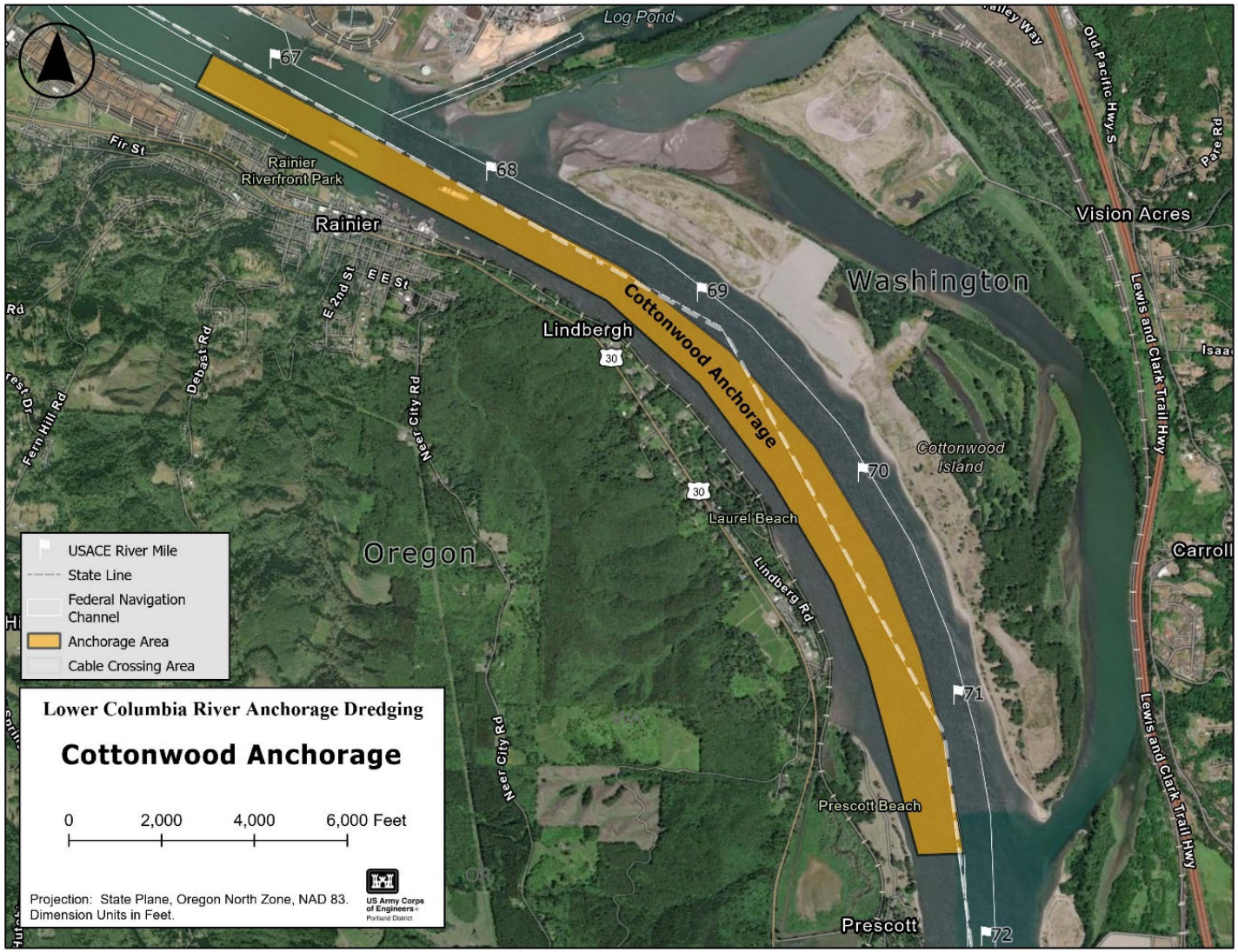


Figure 4. Cottonwood Anchorage

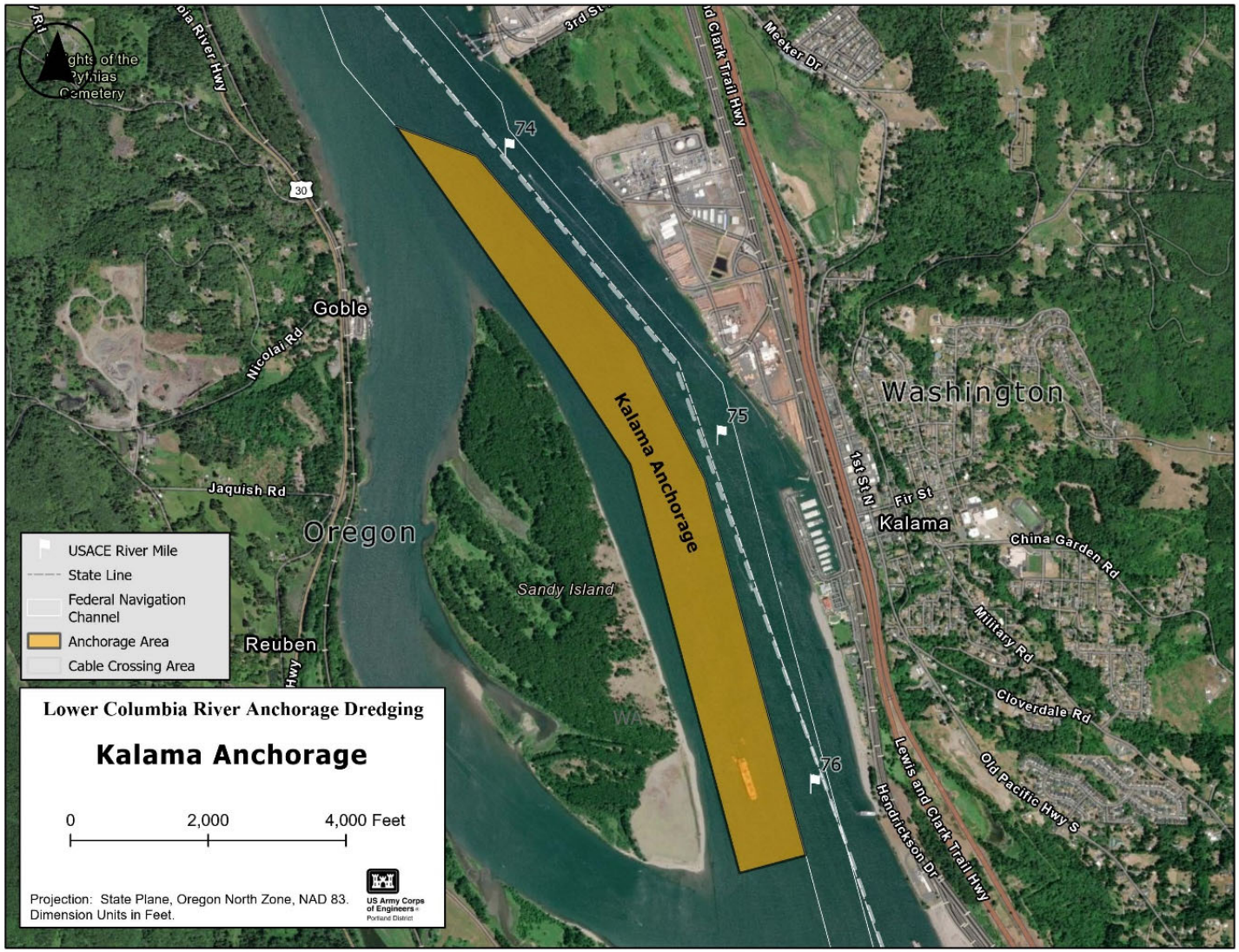


Figure 5. Kalama Anchorage

Figure 6. Vancouver Lower Anchorage

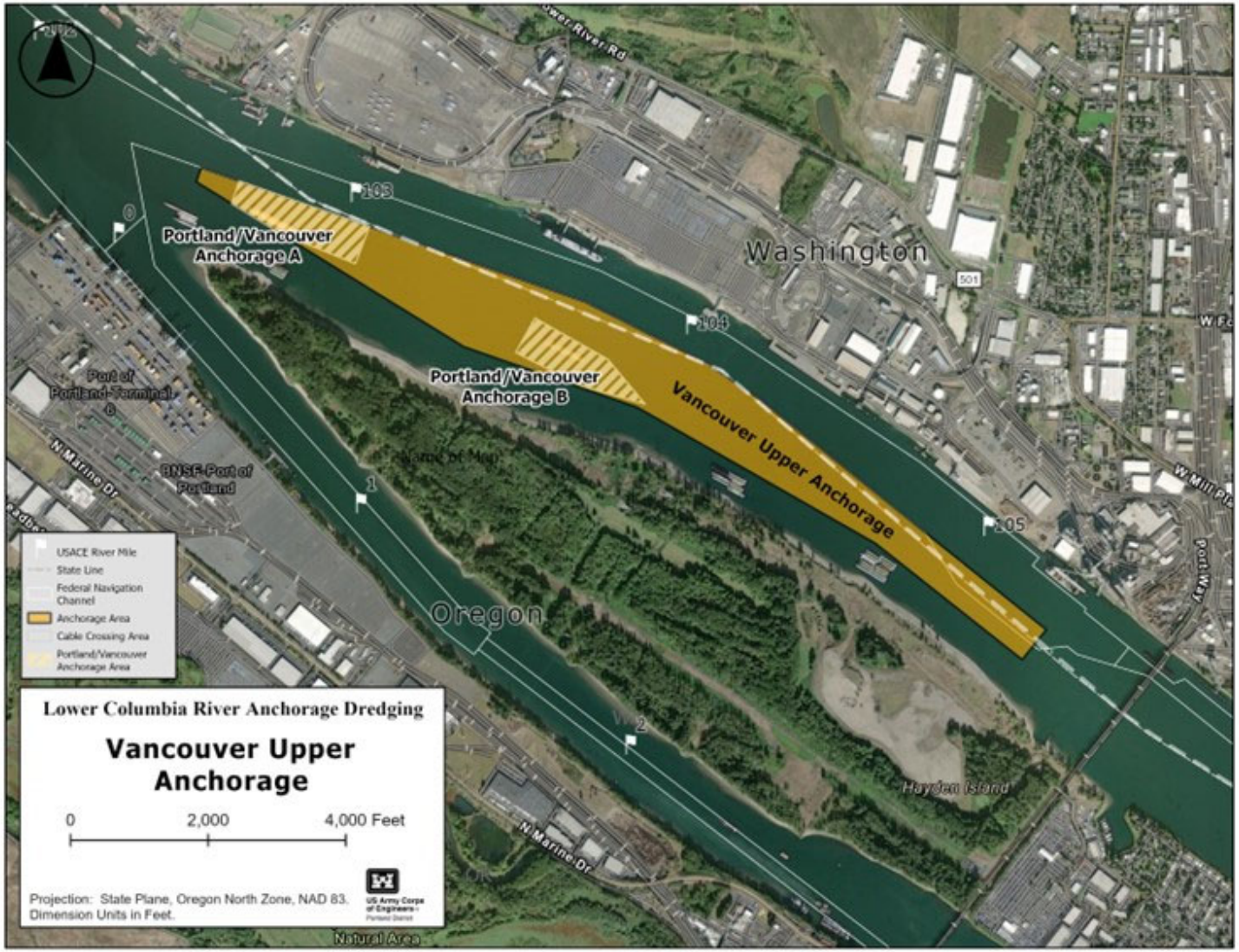


Figure 7. Vancouver Upper Anchorage (including Corps' existing Section 107 project Portland/Vancouver Anchorage areas A & B)

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT
PO BOX 2946
PORTLAND, OR 97208-2946

September 1, 2023

SUBJECT: Request for Clean Water Act Section 401 Lower Columbia River Anchorage Dredging

Loree Randall
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Dear Loree Randall:

The U.S. Army Corps of Engineers, Portland District (Corps) is requesting the Washington Department of Ecology (Ecology) to issue a new Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) for the Lower Columbia River Anchorage Dredging.

The Corps proposes to perform annual dredging to remove shoaling at seven existing, U.S. Coast Guard (USCG)-designated anchorage grounds and Corps Civil Works program anchorages in the Lower Columbia River (LCR), four of which are located within the State of Washington. Anchorage grounds are designated locations in the river where vessels may drop their anchors, release chains, and come to rest facing into the river current. Anchorage grounds improve safety and promote efficiency of ship movement by allowing ships to anchor in the river, as opposed to offshore in the Pacific Ocean. Although the Corps historically has not dredged these anchorages, Congress recently, in Section 106 of WRDA 2020, Public Law 116-260, Dec. 27, 2020, 134 Stat. 1182, provided that the Corps may perform dredging at Federal expense within and adjacent to anchorages established by the USCG. The Corps also proposes to continue maintaining the Corps' Civil Works project called the Portland/Vancouver Anchorages which consist of two sites within the USCG-designated Vancouver Upper anchorage ground that are maintained to specific depths with stern mooring buoys. The Portland/Vancouver Anchorage was approved by the Chief of Engineers on 29 October 1993 under the authority of Section 107 of the River and Harbor Act of 1960, as amended. The Corps is separately authorized by Congress to conduct annual operations and maintenance (O&M) dredging in the LCR Federal Navigation Channel (FNC). The FNC, USCG anchorage grounds, and Corps anchorages operate together as a system for ships to efficiently move commerce up and down the Columbia River. All dredge materials from the anchorages would be placed in water at sites deeper than 20 feet in Oregon or Washington at locations already used by the Corps for maintenance of the FNCs.

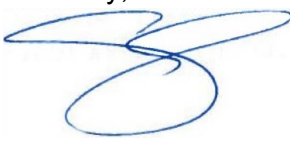
The Corps requests one WQC for ten years. This certification request is consistent with the requirements under 40 CFR Part 121. A pre-filing meeting request (40 CFR 121.4) was submitted using Ecology's online system (Aquatics ID number: 142754) on June 16, 2023. The Corps has verified that the contents of this certification request with its enclosures meets the requirements provided in 40 CFR 121.5.

The Corps' regulation governing timing on requests for 401 WQC for Corps' dredging projects provides that the time period is generally six months, 33 CFR 336.1(b)(8)(iii). In

accordance with Corps' regulations and 40 CFR 121.6, the Corps has established a reasonable period of time to act on this certification request of six months from the date of this request, which will be March 1, 2024. This reasonable period of time was selected because this is an operations and maintenance action requiring no more than standard coordination, is similar to ongoing actions, and a stormwater management review is not required. Any request from Ecology to extend the reasonable period of time should be made in writing to the Corps.

If Ecology requires any additional information regarding this request, please contact Darren Bradford of my staff by email at Darren.L.Bradford@usace.army.mil or phone at 503-808-4663. Thank you for your assistance.

Sincerely,



Enclosure

Amy Gibbons
Chief, Environmental Resources Branch