STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
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September 10, 2020

Corps of Engineers
Portland District
ATTN: Christopher Page
P.O. Box 2946
Portland, OR 97208-2946

RE: Water Quality Certification Order No. **19402** for the Columbia River Federal Navigation Channel Ongoing Operations and Maintenance Dredging, in Pacific, Wahkiakum, Cowlitz, Clark, and Skamania Counties, Washington

Dear Christopher Page:

On June 1, 2020, the Corps of Engineers Portland District (Corps) submitted a request for a Section 401 Water Quality Certification (WQC) under the federal Clean Water Act for the Columbia River Federal Navigation Channel Ongoing Operations and Maintenance Dredging in Pacifc, Wahkiakum, Cowlitz, Clark, and Skamania Counties, Washington.

The proposed project involves the on-going maintenance dredging of the Columbia River to the federally approved depth of 43 feet between Columbia River mile 3.0 to Columbia River mile 145.0. The project also includes dredging various side channels along the river to their federally approved depths.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Loree' Randall at 360-485-2796. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

Brenden McFarland, Section Manager
Environmental Review & Transportation Section, HQ
Shorelands and Environmental Assistance Program

e-cc: Chanda Littles, Corps of Engineers
Michelle Guay, Corps of Engineers
Ron Melin, Cowlitz County
Dave Hicks, Wahkiakum County
Mitch Nickolds, Clark County
Alan Peters, Skamania County
Lisa Hendrickson, Port of Longview
Kim Marcotte, Anchor
Derek Koellman, Anchor
Miranda Adams, Ecology
ECY RE FEDPERMITS
Loree Randall – HQ, SEA

DEPARTMENT OF ECOLOGY

In the Matter of Granting a Water Quality Certification to: Portland District Corps of Engineers In Accordance with 33 U.S.C. 1341 [FWPCA § 401], RCW 90.48.260, RCW 90.48.120 and WAC 173-201A	))))))	**ORDER No. # 19402** Columbia River Operations and Maintenance (O&M) dredging and disposal from river mile (RM) 3 and 145, including some side-channel dredging.

TO: U.S. Army Corps of Engineers
Portland District
Attn: Christopher Page
P.O. Box 2946
Portland, OR 97208-2946

On June 1, 2020, the Portland District Corps of Engineers (Corps) submitted a request for a 401 water quality certification (401 Certification) from the State of Washington Department of Ecology (Ecology) pursuant to the provisions of 33 U.S.C. 1341 (FWPCA § 401). The Corps request is to continue Operations and Maintenance Dredging (O&M) of Columbia River Federal Navigation Channel between River Miles (RM) 3 to 145.

The proposed project involves the on-going maintenance dredging of the Columbia River to the federally approved depth of 43 feetbetween Columbia River mile (CRM) 3.0 to CRM 145. The project also includes dredging various side channels along the river to their federally approved depths.

The dredging and disposal of sediment will occur in both Oregon and Washington. This 401 Certification only authorizes the dredging and disposal of sediment within Washington's waters.

1. Maintenance Dredging

- RM 3.0 to 105.4 – Maintenance dredging will occur to a depth of -48 feet (-43 feet with up to 5 feet of advanced maintenance depth) and overwidth dredging of up to 100 feet in selected high volume shoal areas.
- RM 105.4 to 106.4 – Maintenance dredging will occur to a depth of -40 feet (-35 feet with up to 5 feet of advanced maintenance depth) and overwidth dredging of up to 100 feet in selected high volume shoal areas.
- RM 106.5 to 145 - Maintenance dredging to a depth of -19 feet (-17 feet with up to 2 feet of advanced maintenance depth) and up to 100 feet of over-width dredging where needed.

2. Side-channels

- Baker Bay West Channel dredging to -18 feet and overwidth where needed
- Chinook Channel dredging to -12 feet and overwidth where needed
- Skamokawa Creek dredging to -8.5 feet and overwidth where needed
- Wahkiakum Ferry dredging to -11 feet and overwidth where needed

- Old Mouth Cowlitz river dredging to -10 feet and overwidth where needed
- Elochoman Slough: -12 feet and overwidth where needed
- Lake River: - 8 feet and overwidth where needed

3. Sump Construction and Maintenance Dredging

- Puget Island Sump-Dredge to a depth of 44 ft.
- Howard Island Sump-Dredge to a depth of 43 ft.

4. Shoreline Placement

- Rice Island Dredged Material Placement Site at River Mile 21
- Skamokawa Vista Park Placement Site at River Mile 33.4

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, 16 U.S.C. § 1456, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA § 301, 302, 303, 306 and 307);

2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by Chapter 90.48 RCW and with other applicable state laws; and,

3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. §1341, RCW 90.48.120, RCW 90.48.260, and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Ecology reserves the option to reassess the terms of this Order and amend or revoke, as necessary, in the event that:

1. new sources of potential contamination are discharged or otherwise stand to significantly affect the quality of sediments dredged from the lower Columbia River navigation channel; or,

2. new information indicates that dredging and/or disposal activities are having a significant adverse impact on water quality or characteristic uses of the lower Columbia River.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

I. Duration of Certification

A. This 401 Certification shall become effective on September 10, 2020, and expires on December 31, 2021

B. Ecology is also rescinding Order number 9765 and any associated amendments effective September 10, 2020.

II. In-Water Work Windows

A. In-water work is subject to fishery closure windows within the National Marine Fisheries Service (NMFS) 2012 Biological Opinion (2012 BiOp).

III. Water Quality Monitoring

A. The Corps shall implement the water quality monitoring as described in the *Endangered Specicies Act Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Reinitiation of the Columbia River Navigation Channel Operations and Maintenance Mouth of the Columbia River to Bonneville Dam, Oregon and Washington (NMFS Consultation Number 2011/02095)* dated July 11, 2012. Any changes to monitoring procedures shall be submitted to Ecology for review and approval. Following Ecology's approval the Corps shall implement proposed changes.

B. The Corps shall submit the Water Quality Monitoring data to Ecology upon request.

C. The Corps shall submit an annual monitoring report to Ecology. The report must include:
   i. monitoring locations;
   ii. background levels of turbidity;
   iii. turbidity measurements at required intervals and depths;
   iv. when/if the dredging or disposal was modified or stopped as a result of exceedances of levels of turbidity;
   v. what actions were taken to modify the dredging or disposal if the turbidity were exceeded and/or how long the activity was stopped;
   vi. what BMPs were implemented to bring the turbidity levels into compliance; and
   vii. when the activity began again.

D. If monitoring results demonstrate that the applicable water quality standards or project performance standards are not being met, Ecology may require additional monitoring.

IV. Dredging

The Corps shall conduct its dredging activities according to the following conditions:

A. The following general condition applies to all dredging activities between Columbia River Mile (CRM) 3 and CRM 145:

1. Dredging operations shall be conducted in a manner that minimizes the disturbance or siltation of adjacent waters and prevents the accidental discharge of petroleum products, chemicals or other toxic or deleterious substances into waters of the State.

B. The following conditions apply to the specific dredging activity or the area of the river being dredged:

1. Clamshell Dredging:

a. Area of Mixing: The point of compliance shall be 900 feet downcurrent from the point of dredging and no more than 150 feet laterally from the vessel.
b. Each pass of a clamshell bucket shall be complete with no material once in the bucket returned to the water.
c. No dumping of partial or full buckets of material back into the project area is allowed.
d. Control the volume, speed, or both of digging passes to minimize siltation.
e. Large debris picked up by a clamshell dredge shall be removed from the dredged sediments prior to disposal at a flowlane disposal sites. Large debris includes old pilings or sinker logs [longer then three feet or greater than one foot in diameter], tree stumps, and man-made materials such as scrap metals, car bodies, broken concrete or asphalt and the like.

2. Hopper and Pipeline Dredging:

a. Area of Mixing The point of compliance shall be 900 feet downcurrent from the point of dredging and no more than 150 feet laterally from the vessel.
b. Hopper and pipeline dredges shall be operated with the intake at or below the surface of the sediments being removed during all periods of operation.
c. Reverse purging of the intake line shall be held to an absolute minimum.
d. If water is pumped through the dragheads to flush out the hopper dredge bins, the heads shall be at least twenty (20) feet below the water surface.

V. Dredged Material Disposal

The Corps is proposing to dispose of the dredged material at a combination of the following sites: [1] in-water sites, such as re-handling and flowlane sites located in or near the mainstem reaches of the river; [2] shoreline or beach nourishment sites, and [3] upland sites.

A. The Corps shall continue to develop and implement a regional sediment management (RSM) program that encompasses this project as well as other Columbia River navigation projects. Highest priority shall be given to placing dredged material at sites that have been identified by state and federal resource agencies as utilizing the material beneficially. When available for use, the Corps shall fully integrate these beneficial use sites into this project.

B. Prior to each dredging cycle, the Corps shall contact the PSET agencies to determine whether additional sediment testing is required. If additional testing is required, no dredging or disposal shall be conducted until the material has been tested and a suitability determination has been issued. Areas have the following ranking in potential for contamination and the following recency determinations. Contact the PSET for a possible extension on any of these determinations.

Mainstem River Channel
Lower Columbia River deep-draft Federal Navigation Channel
River Miles 3 to 106.5
Ranking: Very Low
Recency Determination Expires March 2026

Columbia River Federal Navigation Channel, Vancouver to the Dalles
River Miles 106 to 192.5
Ranking: Very Low
Recency Determination Expires January 2029

Side Channels
Baker Bay West Channel (Ilwaco Federal Navigation Channel)
River Mile 3.2
Ranking & Recency Determination: inner channel (1+35 to 3+10) low/expiration date, October 2022
Ranking & Recency Determination: outer channel (0+00 to 1+35) very low/expiration date, Otober 2025

Chinook Federal Navigation Channel
River Mile 5.0
Ranking: low
Recency Determination expires October 2022

Skamokawa Creek Federal Navigation Side Channel
River mile 33.5
Ranking: low
Recency Determination expires April 2026

Eclochoman Marina and marina access channel
River Mile 39.0
Ranking: low
Recency Determination Expires August 2022

Wahkiakum Ferry Side Channel
River Mile 43.5
Ranking: very low
Recency Determination expires September 2023

Old Mouth Cowlitz River Federal Navigation Channel
River Mile 67.7
Ranking: Low
Recency Determination expires April 2026

Lake River Federal Navigation Channel
River Mile 87.5
Ranking & Recency Determination: Laker-01 Very Low/expiration date, November 2028
Ranking & Recency Determination: Laker-02 to Laker-05 Moderate/expiration date, November 2023

C. **Flowlane Disposal:**

The following conditions apply to disposal of dredged material in the flowlane of the Columbia River:

1. Area of Mixing for disposal by hopper, bottom dump scow, or down spout: The point of compliance shall be 900 feet downcurrent from the point of discharge and no more than 150 feet laterally from the vessel.

2. Disposal of material shall be conducted in a manner that prevents mounding of the disposed material.

3. Flowlane disposal by a hopper dredge or a bottom dump scow is approved provided the disposal sites are located:

    a. waterward of the minus 20-foot contour, Columbia River Datum (CRD); and,
    b. to the greatest extent practicable, flowlane disposal sites shall be selected

so that disposal material (i) disperses into or immediately adjacent to the mainstem navigational channel; (ii) is not likely to cause significantly increased shoaling in downstream side channels or to shoreline facilities such as docks, wharfs, vessel slips and marinas; and (iii) is not likely to cause a significant adverse alteration of bottom habitats critical to the life history of white sturgeon.

4. Ecology will consider the use of alternative methods for flowlane disposal, such as a flat-topped barge unloaded by a small earth mover. However, the use of an alternative disposal method shall require special review and approval by Ecology under this Order prior to usage.

5. Flowlane sites may be used for the disposal of sediments dredged by pipeline provided the dredged material is discharged through a downspout that is lowered at least 20 feet into the water column.

D. **Shoreline Disposal by Pipeline Dredge:**

The following conditions apply to pipeline dredging operations that involve the unconfined or partially confined disposal of dredged material on or immediately adjacent to the shoreline. Historically, this manner of disposal has been used primarily for erosion control, such as to protect property or structures, to nourish actively eroding beaches, and to fill fish stranding sites. Shoreline disposal may also be done to enhance, restore or create various riverine habitat features such as a spit or lagoon.

Beach nourishment is the most common shoreline disposal activity and is done by pumping a slurry of sand and water directly onto an actively eroding beach. The sand settles out on the beach while the turbid water or runoff flows back into the river.

1. Area of Mixing: The point of compliance shall be 900 feet downcurrent from the discharge point.
2. Only clean dredged materials shall be placed at shoreline disposal sites authorized in this Order.
3. No petroleum products, chemicals or other tocix or deleterious matreials shall be allowed to enters waters of the state
4. All fuel and chemical shall be kept, stored, handled and used in a manner that prevents discharge or entry into waters of the state including wetlands.
5. All construction debris and other solid waster material shall be properly managed and disposed of in an upland disposal site approved by the appropriate regulatory authority.

6. Shoreline disposal operations, and particularly beach nourishment, may result in the placement of dredged material waterward of the ordinary high water mark. In such cases, the disposal site shall be regraded to an approximate slope of 10 to 15 percent, with no swales.

7. Impacts to riparian vegetation at shoreline disposal sites shall be avoided or minimized whenever possible.
8. Erosion control measures shall be carried out to prevent the wind erosion of dredged material back into the channel.

E. **Upland Disposal by Pipeline Dredge:**

The following conditions apply to pipeline operations that pump dredged material to an upland site or confined disposal facility (CDF). Typically, a CDF consists of the following design features: [1] Earthen dikes that form the perimeter of the facility. [2] A weir structure that provides flow control and retention of the solid fraction of dredged material. [3] An outlet structure that conveys the turbid water fraction of dredged material [effluent] to a single point of discharge.

1. Area of Mixing [for Single-point Effluent Discharge]: The point of compliance shall be 300 feet downcurrent of the point of discharge.
2. Only clean dredged materials shall be disposed at CDF sites authorized under this Order.
3. All CDF sites shall have containment infrastructure that retains dredge material and water to allow for sediment settling.
4. Prior to using an CDF, all earthen dikes, weir structures, and outlets shall be inspected and repaired as needed.
5. Removal of any vegetation within a CDF placement site to prepare it for disposal of dredged material shall not result in bare soil areas within 100 feet of the outlet from the weir unless otherwise authorized by Ecology.
6. No petroleum products, chemicals or other toxic or deleterious materials shall be allowed to enter waters of the state.
7. All fuel and chemicals shall be kept, stored, handled and used in manner that prevents discharge or entry into waters of the state, including wetlands.
8. All construction debris and other solid waste material shall be properly managed and disposed of in an upland disposal site approved by the appropriate regulatory authority.
9. Staging areas will be located a minimum of 50 feet and, where practical, 200 feet from waters of the state including wetlands. If a staging area must be located witin 50 feet of waters of the state, then the Applicant shall provide a written explanation and obtain approval from Ecology's Federal Permit Manager before placing the staging area in the 50 foot setback area.
10. No equipment shall enter, operate, be stored or parked within any sensitive area except as specifically provided for in this Order.
11. Equipment left overnight within a CDF area shall have secondary containment to catch any leaks, drips, spills.
12. Fuel hoses, oil drums, or or fuel transfer valves and fittings, etc. shall be checked regularly dor drips or leaks, and shall be maintained and stored properly to prevent spills into state waters.
13. At Puget Island, side casting of excess construction access road building materials into waters of the state is prohibited.

14. CDF Design and Operation. The following "best management practices" pertain to the design and operation of a CDF:

    a. The CDF should be designed to provide the maximum practical degree of solids retention during operation, and for the entire life of the site.
    b. The outfall should be located so as to provide the maximum amount of dilution or dispersion of the effluent and to minimize any potential scour or erosion effects to more sensitive aquatic resources such as small tributaries and sloughs, shallow tide flats, and wetlands.

    c. To the greatest extent practicable, CDF sites shall be stabilized to prevent significant offsite erosion of the dredged material by either water or wind transport.

VI. Wetland and Wildlife Mitigation

A. The mitigation sites shall be developed as described in the Columbia River Channel Improvement Project Supplemental Evaluation, August 2008.

B. The Cottonwood Island mitigation site shall employ the specific construction and maintenance elements, as described in the Statement of Work – Columbia River Channel Improvement – Mitigation Cottonwood Island Riparian Restoration (Corps document number W9127N-09-C-0046).

C. The Woodland Bottoms- Chumbley mitigation site shall employ specific construction and maintenance elements, as described in the Statement of Work – Columbia River Channel Improvement – Mitigation – Woodland Bottoms, Chumbley Riparian Restoration (Corps document number W9127N-09-C-0014).

D. The Corps shall monitor all mitigation sites for a period of 10 years after construction. A minimum of five monitoring events are required within that period, e.g. years 1, 3, 5, 7, 10.

VII. Reporting

A. The Corps shall compile and submit an annual report to Ecology no more than 90 days after the dredging season ends. The annual report shall include:

- locations dredging and disposal occurred;
- amounts of material dredged and disposed of in all locations;
- descriptions of upland disposal and beach nourishment locations, including BMPs employed and effectiveness of those BMPs at these sites;
- and annual turbidity monitoring, including explanation of exceedances, s described in Condition III.C, of this Order.

B. The annual report shall be submitted via e-mail to fednotification@ecy.wa.gov and cc to loree.randall@ecy.wa.gov. All reports shall be identified with the Order number, project name, project contact and the contact phone number.

VIII. Emergency and/or Contingency Measures

A. If dredging/disposal operations are found not to be in compliance with any of the provisions of this order, or result in conditions causing distressed or dying fish, the Corps shall immediately take the following actions:

1. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.

2. In the event of finding distressed or dying fish, the Corps shall collect fish specimens and water samples in the affected area and, within the first hour of such conditions, make every effort to have the water samples analyzed for dissolved oxygen and total sulfides. Ecology may require such sampling and analyses before allowing the work to resume.

3. Notify Ecology of the nature of the problem, any actions taken to correct the problem, and any proposed changes in operations to prevent further problems.

IX. Spill Prevention and Control

a. Any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, is prohibited.

b. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. Proper security shall be maintained to prevent vandalism.

c. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled substances and used cleanup materials.

d. Spills into state waters, spills onto land with a potential for entry into state waters, or other significant water quality impacts, shall be reported immediately to Ecology's Southwest Regional Office at (360) 407-6300 (a 24-hour phone number)

X. Notification

A. The Corps or their designated contractor shall notify Ecology at least 14 days prior to the preconstruction meeting in any given year, at least 14 days prior to the scheduled start of dredging in any given year and upon completion of dredging and disposal operations covered by this Order in any given year. Notifications shall be sent to fednotification@ecy.wa.gov and cc to loree.randall@ecy.wa.gov.

XI. Other Requirements

A. Copies of this Order shall be kept on the job site and readily available for reference by the Corps of Engineers, Ecology personnel, the contractor, and other appropriate state and local government inspectors.

B. Ecology retains jurisdiction to make modifications hereto through supplemental order, if it appears necessary to protect the public interest during the construction and monitoring of this project.

XII. Penalties

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do both of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel Road SW STE 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this Order to:

Loree' Randall
Department of Ecology
Headquarters
P.O. Box 47600

360-407-6068
lora461@ecy.wa.gov

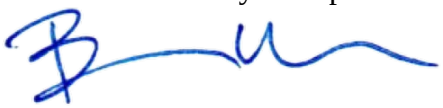
MORE INFORMATION

- **Pollution Control Hearings Board Website**
  http://www.eluho.wa.gov/Board/PCHB
- **Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board**
  http://app.leg.wa.gov/RCW/default.aspx?cite=43.21B
- **Chapter 371-08 WAC – Practice And Procedure**
  http://app.leg.wa.gov/WAC/default.aspx?cite=371-08
- **Chapter 34.05 RCW – Administrative Procedure Act**
  http://app.leg.wa.gov/RCW/default.aspx?cite=34.05
- **Chapter 90.48 RCW – Water Pollution Control**
  http://app.leg.wa.gov/RCW/default.aspx?cite=90.48
- **Chapter 173.204 WAC – Sediment Management Standards**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-204

- **Chapter 173-200 WAC – Water Quality Standards for Ground Waters of the State of Washington**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-200
- **Chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A

SIGNATURE

Dated this 10th day of September 2020 at the Department of Ecology, Lacey, Washington



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Brenden McFarland, Section Manager
Environmental Review & Transportation Section, Headquarters
Shorelands and Environmental Assistance Program