Joint Permit Application

This is a joint application, and must be sent to all agencies (Corps, DSL, and DEQ). Alternative forms of permit applications may be acceptable; contact the Corps and DSL for more information.

4Dec2024

DATE STAMP

U.S. Army Corps of Engineers Portland District	Oregon Department of State Lands	Oregon Department of Environmental Quality
Action ID Number NWP-2022-176	Number	

(1) TYPE OF PERMIT(S) IF KNOWN (check all that apply)

Corps: ☐ Individual ☐ Nationwide No.: _____ ☐ Regional General Permit_____ ☐ Other (specify)_____

DSL: ☐ Individual ☐ GP Trans ☐ GP Min Wet ☐ GP Maint Dredge ☐ GP Ocean Energy ☐ No Permit ☐ Waiver

(2) APPLICANT AND LANDOWNER CONTACT INFORMATION

	Applicant	Property Owner (if different)	Authorized Agent (if applicable) ☒ Consultant ☐ Contractor
Name (Required)	Jessica McDonald		Eric Campbell
Business Name	City of Warrenton		Campbell Environmental, LLC
Mailing Address	PO Box 250 | 501 NE Harbor Pl. Warrenton, OR 97146		28948 SW Meadows Loop Wilsonville, OR 97070
Business Phone	503-861-3822		503-680-8390
Cell Phone	503-383-5581		503-680-8390
Email	jmcdonald@warrentonoregon.us		eric@campbellenviro.com

(3) PROJECT INFORMATION

A. Provide the project location

Project Name	Latitude & Longitude (decimal)
Warrenton and Hammond Marinas Piling Replacement	46.1660 N / -123.9172 W (Warrenton) 46.2031 N / -123.9499 W (Hammond)

Project Address / Location	City (nearest)	County
550 NE Harbor Pl., Warrenton / 320 Lake Dr., Hammond	Warrenton / Hammond	Clatsop

Township	Range	Section	Quarter/Quarter	Tax Lot(s)
8 North	10 West	22 and 5	NW and SW	06700, 06400, 00700, 00300 / 00200

Brief Directions to the Site

Take Highway 101 to East Harbor Dr., turn onto NE Heron Ave., and arrive at Warrenton Marina.
Take Highway 101 to Fort Stevens Hwy., turn onto Columbia Beach Ln. to Ridge Rd., follow to Hammond Mar.

B. What types of waterbodies or wetlands are present in your project area? (Check all that apply.)

☒ River / Stream ☐ Non-Tidal Wetland ☐ Lake / Reservoir / Pond
☒ Estuary or Tidal Wetland ☐ Other ☐ Pacific Ocean

Waterbody or Wetland Name	River Mile	6th Field HUC Name	6th Field HUC (12 digits)
Skipanon Waterway and Columbia River	1.1 and 8.6	Skipanon River – Frontal Columbia	170800060208

C. Indicate the project category. (check all that apply.)

☐ Commercial Development ☐ Industrial Development ☐ Residential Development
☐ Institutional Development ☐ Agricultural ☐ Recreational
☐ Transportation ☐ Restoration ☐ Bank Stabilization
☐ Dredging ☐ Utility lines ☐ Survey or Sampling
☒ In- or Over-Water Structure ☒ Maintenance ☒ Other: Piling Replacement

(4) PROJECT DESCRIPTION

A. Summarize the overall project, including work in areas both in and outside of waters or wetlands.

The City of Warrenton (City) is requesting a five (5)-year permit to allow for in-kind replacement of up to 385 existing, deteriorated wood and steel pilings located within the Warrenton and Hammond Marinas in Clatsop County (see Attachment A: Figures). The pilings support several moorage docks and tie-ups within the marinas that are utilized for mooring fishing and recreational vessels. Many of the existing pilings were installed in the 1980s and have begun to deteriorate both above and below the water's surface, and require replacement in order to maintain marina operability and longevity.

It is anticipated that an average of 77 pilings will be replaced each year, over the five (5)-year duration of the permit. In the event that not all 385 pilings can be replaced during the five (5)-year duration of the permit due to budget constraints and/or contractor availability, then the City will simply reapply for a permit extension after five years to complete the project.

B. Describe work within waters and wetlands

Work within waters (i.e., below highest measured tide [HMT] of the Skipanon Waterway and Columbia River) will include in-kind replacement of up to 385, deteriorated wood and steel pilings (ranging from 10 to 24 inches in diameter) (see Attachment A: Figures). A summary of impacts below the HMT is provided below (Table 1). The proposed project will not impact wetlands.

Table 1. Summary of Permanent and Temporary Impacts to Waters and/or Wetlands.

Removal Volumes and Dimensions (if more than 7 impact sites, include a summary table as an attachment)							
Wetland / Waterbody Name *	**Removal Dimensions**					**Time Removal is to Remain ****	**Material*****
	Length (ft.)	**Width (ft.)**	**Depth (ft.)**	**Area (sq. ft.)**	**Volume (c. y.)**		
Skipanon Waterway							
Removal of up to 220, 10" - 14" dia. pilings	220	~1	40	~220	326	**Permanent**	Round wood/steel
Columbia River							
Removal of up to 165, 10" - 24" dia. pilings	248	~1.5	40	~330	489	**Permanent**	Round wood/steel

Total Removal Volumes and Dimensions			
	Length (ft)	**Area (sq. ft.)**	**Volume (c.y.)**
Total Removal to Wetlands	N/A	N/A	N/A
Total Removal Below Ordinary High Water	N/A	N/A	N/A
Total Removal Below Highest Measured Tide	468	550	815
Total Removal Below Mean High Water Tidal Elevation	468	550	~543

Fill Volumes and Dimensions (if more than 7 impact sites, include a summary table as an attachment)							
Wetland / Waterbody Name *	**Fill Dimensions**					**Time Fill is to Remain ****	**Material*****
	Length (ft.)	**Width (ft.)**	**Depth (ft.)**	**Area (sq. ft.)**	**Volume (c. y.)**		
Skipanon Waterway							
Installation of up to 220, 10"-14" dia. pilings	220	~1	40	~220	326	**Permanent**	Round steel
Barge spud piles	3	1.5	~10	4.5	1.6	Temporary	Steel piles
Columbia River							
Installation of up to 165, 10"-24" dia. pilings	248	~1.5	40	~330	489	**Permanent**	Round steel
Barge spud piles	3	1.5	~10	4.5	1.6	Temporary	Steel piles

I. Total Fill Volumes and Dimensions			
	Length (ft)	Area (sq. ft.)	Volume (c. y.)
Total Fill to Wetlands	N/A	N/A	N/A
Total Fill Below Ordinary High Water	N/A	N/A	N/A
Total Fill Below Highest Measured Tide	468	550	815
Total Fill Below Mean High Water Tidal Elevation	468	550	~543

* If there is no official name for the wetland or waterway, create a unique name (such as "Wetland 1" or "Tributary A").

** Indicate whether the proposed area of removal or fill is permanent or, if you are proposing temporary impacts, specify the days, months or years the fill or removal is to remain.

*** Example: soil, gravel, wood, concrete, pilings, rock etc.

C. Construction Methods. Describe how the removal and/or fill activities will be accomplished to minimize impacts to waters and wetlands.

Construction crews and equipment will access the project site via the existing docks and floating barges. The existing wood and steel pilings will be dislodged with a vibratory hammer and slowly lifted from the sediment and placed into a contained area for appropriate upland disposal. The proposed steel replacement pilings will be installed using a vibratory hammer to a depth of approximately 30 feet into the substrate. It is anticipated that each piling will require approximately 15 to 30 minutes of vibratory hammer use. In the event that the vibratory hammer cannot fully embed the replacement pilings due to obstructions below the substrate, use of an impact hammer may be required to seat the pilings to their required depth. It is estimated that the average installation rate will be four pilings per day. The contractor will implement appropriate sound attenuation methods as outlined below in the Measures to Minimize Impacts.

Measures to Minimize Impacts: The following conservation measures have been incorporated into the proposed project design and construction methods to minimize and avoid potential adverse effects to aquatic species, their designated Critical Habitat elements, and Essential Fish Habitat (EFH):

- All piling replacement conducted below the HMT will occur during the SLOPES-required in-water work period (IWWP) for "pile driving" in the lower Columbia River estuary (October 1 – November 30), a period when Endangered Species Act (ESA)-listed species are less likely to be present within the vicinity of the project area.
- All pilings will be removed with a vibratory hammer. During piling removal, the following criteria will be implemented to minimize sediment disturbance and resuspension:
    - Install a floating surface boom to capture floating surface debris.
    - Consider the best tidal condition for piling removal; try to remove in-the-dry.
    - Keep all equipment (e.g., bucket, cable, vibratory hammer) out of the water, grip piles above the waterline, and complete work during low water and low current conditions.
    - Dislodge piling with a vibratory hammer, when possible; never intentionally break a pile.
    - "Wake" the piling by vibrating to break the friction bond between the piling and sediment.
    - Slowly lift the pile from the sediment and through the water column.
    - Place the pile in a containment basin on a barge deck, pier, or shoreline without attempting to clean or remove any adhering sediment.
    - Dispose of all removed piles, floating surface debris, any sediment spilled on work surfaces, and all containment supplies at a permitted upland disposal site.
- When a pile breaks or is intractable during removal, removal will continue as follows:
    - Every attempt short of excavation will be made to remove each piling, if a pile in uncontaminated sediment is intractable, breaks above the surface, or breaks below the surface, cut the pile or stump off at least 3 feet below the surface of the sediment.

- All new pilings will be installed with a vibratory hammer. In the event that the vibratory hammer cannot full embed the piles to the necessary depth, the contractor may use an impact hammer to seat the piles. Use of an impact hammer will be limited to daylight hours between 7 a.m. and 7 p.m.
- The contractor will initiate daily "soft-start" procedures to provide a warning and/or give species near piling removal and installation activities a chance to leave the area prior to a vibratory hammer operating at full capacity; thereby, exposing fewer species to loud underwater and airborne sounds.
    - A soft-start procedure will be used at the beginning of in-water piling removal and installation, or any time piling removal/installation has ceased for more than 30 minutes.
    - For vibratory hammer operation, the contractor will initiate noise from vibratory hammers for 15 seconds at reduced energy followed by a 30-second waiting period. The procedure shall be repeated two additional times.
    - For impact pile driving (if necessary), the contractor will provide an initial set of strikes from the impact hammer at reduced energy, followed by a 30-second waiting period, then two subsequent sets. (The reduced energy of an individual hammer cannot be quantified given the variations between individual drivers. In addition, the number of strikes will vary at reduced energy given that raising the hammer at less than full power and then releasing it results in the hammer bouncing as it strikes the pile, resulting in multiple strikes).
- During the use of an impact hammer (if required) a multi-level bubble curtain will be installed to reduce sound pressure levels. The bubble curtain system shall conform to the following:
    - If water velocity is greater than 1.6 feet per second, surround the piling being driven by a confined bubble curtain (e.g., a bubble ring surrounded by a fabric or non-metallic sleeve) that will distribute air bubbles around 100% of the piling perimeter for the full depth of the water column. Bubblers shall completely surround the pile.
    - Piling shall be completely engulfed in bubbles over the full depth of the water column at all times when an impact pile driver is in use. Bubbles are not required during vibratory pile driving.
- A Pollution Control Plan (PCP) will be prepared by the Contractor and carried out commensurate with the scope of the project that includes the following:
    - Best management practices to confine, remove, and dispose of construction waste.
    - Procedures to contain and control a spill of any hazardous material.
- All conditions of ODEQ's 401 Water Quality Certification will be followed.
- All equipment will be inspected daily for fluid leaks. Any leaks detected will be repaired before operation is resumed. Stationary power equipment (i.e., cranes) operated within 150 feet of the river will be diapered to prevent leaks.
- All new replacement pilings will be fitted with devices to prevent perching by piscivorous birds.

D. Describe source of fill material and disposal locations if known.

Fill will consist of up to 385 steel pilings ranging from 10 to 24 inches in diameter. All removed wood and steel pilings will be placed in a contained area and hauled to an upland location for recycling or disposal.

E. Construction timeline.

What is the estimated project start date? October 2025

What is the estimate project completion date? November 2029

Is any of the work underway or already complete? ☐ Yes ☒ No

If yes, describe.

(5) PROJECT PURPOSE AND NEED

Provide a statement of the purpose and need for the overall project.

The purpose of the proposed project is to replace up to 385 existing, deteriorated wood and steel pilings located within the Warrenton and Hammond Marinas in Clatsop County. The pilings support several moorage docks and tie-ups within the marinas that are utilized for mooring fishing and recreational vessels. Many of the existing pilings were installed in the 1980s and have begun to deteriorate both above and below the water's surface, and require replacement in order to maintain marina operability and longevity.

(6) DESCRIPTION OF RESOURCES IN PROJECT AREA

A. Describe the existing physical and biological characteristics of each wetland or waterbody. Reference the wetland and waters delineation report if one is available. Include the list of items provided in the instructions.

Columbia River: The Columbia River flows for more than 1,200 miles and is one of the largest rivers in North America. The river originates in British Columbia, Canada, and enters the U.S. in the northeastern corner of Washington State. From there it flows south towards the Snake River confluence, and then heads westward forming the Oregon-Washington border before flowing into the Pacific Ocean. The Columbia River basin drains an area of approximately 260,000 square miles, and is the most hydroelectrically developed river system in the world. More than 400 dams (11 on the mainstem) and hundreds of major and modest structures on tributaries tap a large portion of the Columbia River's generating capacity (CCRH 2013[1]).

The lower Columbia River basin includes all tributaries and watersheds that drain into the Columbia River from Bonneville Dam (river mile 146) to its confluence with the Pacific Ocean. Major tributaries of the lower Columbia River include the Clatskanie River, Cowlitz River, Grays River, Lewis River, Sandy River, Washougal River, Willamette River, and Youngs River. The lower 46 miles of the Columbia River is considered estuary (LCREP 1999[2]). Within the lower estuary, the river has been channelized to facilitate development to the water's edge.

In general, water quality throughout the lower Columbia River basin has been significantly affected by human activities such as dams and diversion structures, water withdrawals, farming and grazing, road construction, mining activities, and urbanization. Increased stream temperatures have occurred throughout the basin and have a significant effect on salmonid metabolism, growth rate, disease resistance, timing of adult migrations, fry emergence, and smoltification. In addition, excess nutrients, low levels of dissolved oxygen, heavy metals, and changes in pH have all directly affected the water quality for salmon, steelhead, and bull trout both as adults and juveniles as these fish migrate upstream and downstream between spawning grounds and rearing areas. The lower Columbia River within the project area is on the Oregon Department of Environmental Quality (ODEQ) 303(d) list for arsenic, DDE, fecal coliform, methylmercury, PCBs, and dissolved O_2 (ODEQ 2024[3]).

The Hammond Marina is located along the southern shoreline of the Columbia River within a protected boat basin. This is considered a high energy area of the river with strong lateral currents. The riverbanks at this location are armored and contain minimal riparian vegetation. The northeast side of the marina is bound by breakwaters which provide protected access for vessels. The marina substrates consist primarily of silt and sand. River flows in the lower Columbia River are relatively consistent as a result of hydrological regulation at upstream dams, but are still subject to twice-daily tidal fluctuations. The HMT elevation near the Hammond Marina is 11.31 feet MLLW (11.34 NAVD88) (DSL 2010[4]).

[1]Center for Columbia River History (CCRH). 2013. http://www.ccrh.org/.
[2]Lower Columbia River Estuary Partnership (LCREP). 1999. Lower Columbia River Comprehensive Conservation and Management Plan. 353 pp.
[3]ODEQ (Oregon Department of Environmental Quality). 2024. Oregon's 2022 Integrated Report Assessment Database and 303(d) List. https://rstudioconnect.deq.state.or.us/2022_IR_Database/
[4]DSL (Oregon Department of State Lands). 2010. Using Tidal Data to Determine HMT. October 19, 2010.
[5]CH2M Hill. 2013. *Visual Impact Assessment of the Oregon LNG Bidirectional Terminal.* March 2013.

Skipanon Waterway: The Skipanon Waterway consists of the lower 1.5 miles of the Skipanon River as it empties into the lower Columbia River estuary. This lower section of the Skipanon River has been altered (straightened and widened) through historic dredging and lined with riprap to provide access to the Warrenton Marina and the Hampton Affiliates (formerly Weyerhaeuser) Warrenton lumber mill, which occupies a large

portion of the west side of the waterway (CH2M 2013[5]). In the vicinity of the Warrenton Marina (river mile 1.1), the shoreline is highly developed and consists of numerous docks, over-water structures, and steep armored banks that provide very little habitat complexity and allow for little riparian vegetation. As with the lower Columbia River, water quality within the Skipanon Waterway has been significantly affected by urbanization and industry. The Skipanon Waterway is currently 303(d)-listed for fecal coliform, dissolved oxygen, alkalinity, chloride, and iron (ODEQ 2024[3]). Flows in the Skipanon Waterway are generally consistent and are subject to twice-daily tidal fluctuations. The HMT elevation within the project area is approximately 12.0 MLLW (DSL 2010[4]). Substrates at the Warrenton Marina consist primarily of silt and sand.

Floodplain: The proposed project will result in no net-rise within the 100-year floodplain of the Columbia River or Skipanon Waterway.

ESA-Listed Species: There are nine species (16 populations) listed under the Federal Endangered Species Act (ESA) with the potential to occur within the vicinity of the project area (Table 2). In addition, the project area contains designated Critical Habitat, Essential Fish Habitat (EFH) as defined by the Magnuson-Stevens Act, and Essential Salmonid Habitat (ESH) as defined by the DSL.

Table 2. ESA-listed species with the potential to occur within the project area[6].

Species	Population (ESU/DPS)	Federal Status	Closest Designated Critical Habitat	Potential Site Use
Chinook salmon *Oncorhynchus tshawytscha*	Lower Columbia River ESU	Threatened (70FR37160)	Columbia River and Skipanon Waterway	Migration and rearing
	Upper Willamette River ESU	Threatened (70FR37160)	Columbia River	Migration and rearing
	Upper Columbia River Spring-Run ESU	Endangered (70FR37160)	Columbia River	Migration
	Snake River Spring/ Summer-Run ESU	Threatened (70FR37160)	Columbia River	Migration
	Snake River Fall-Run ESU	Threatened (70FR37160)	Columbia River	Migration and rearing
Coho salmon *O. kisutch*	Lower Columbia River ESU	Threatened (70FR37160)	Columbia River and Skipanon Waterway	Migration and rearing
Sockeye salmon *O. nerka*	Snake River ESU	Endangered (70FR37160)	Columbia River	Migration
Chum salmon *O. keta*	Columbia River ESU	Threatened (70FR37160)	Columbia River	Migration and rearing
Steelhead *O. mykiss*	Lower Columbia River DPS	Threatened (71FR834)	Columbia River	Migration and rearing
	Upper Willamette River DPS	Threatened (71FR834)	Columbia River	Migration
Steelhead *O. mykiss*	Middle Columbia River DPS	Threatened (71FR834)	Columbia River	Migration
	Upper Columbia River DPS	Threatened (71FR834)	Columbia River	Migration
	Snake River Basin DPS	Threatened (71FR834)	Columbia River	Migration
Eulachon (smelt) *Thaleichthys pacificus*	Southern DPS	Threatened (75FR13012)	Columbia River	Migration and rearing
Green sturgeon *Acipenser medirostris*	Southern DPS	Threatened (71FR17757)	Columbia River and Skipanon Waterway	Migration and rearing
Bull trout *Salvelinus confluentus*	Coastal Recovery Unit	Threatened (63FR31647)	Columbia River	Migration
Marbled murrelet *Brachyramphus marmoratus*	N/A	Threatened (56FR58804)	Approximately 15 miles southeast	Foraging

[6]Sources: NMFS (National Marine Fisheries). 2024. Northwest Regional Office, ESA Salmon Listings.http://www.westcoast.fisheries.noaa.gov/index.html
. StreamNet. 2024. Data Query and Critical Habitat Mapper. http://www.streamnet.org/.
USFWS (U.S. Fish and Wildlife Service). 2024. Critical Habitat Mapper. https://ecos.fws.gov/ecp/report/table/critical-habitat.html

It is anticipated that the potential effects of the proposed project on ESA-listed fish species under the jurisdiction of the National Marine Fisheries Service (NMFS) will be covered under the existing *2012 Formal Programmatic Opinion, Letter of Concurrence, and Essential Fish Habitat Consultation for Revisions to Standard Local Operating Procedures for Endangered Species to Administer Actions Authorized or Carried Out by the U.S. Corps of Engineers in Oregon (SLOPES IV In-water/Over-water Structures)*. The project's need for a Section 10 Permit from the Corps authorizes implementation of the terms and conditions of the SLOPES IV In-water/Over-water Structures as a means to comply with the requirements of Section 7 of the ESA. Specifically, the proposed project has been designed to comply with the applicable design and construction criteria to *maintain, rehabilitate, replace, or remove an existing in-water or overwater structure* (see Attachment B: SLOPES IV Action Notification Form).

It is also anticipated that the potential effects of the proposed project on ESA-listed bull trout under the jurisdiction of the U.S. Fish and Wildlife Services (USFWS) will be covered under the existing *2017 Programmatic Biological Opinion for Standard Local Operating Procedures for Endangered Species to Administer Actions and Effects to Bull Trout (SLOPES Bull Trout)* authorized or carried out by the Corps in Oregon. The project area does not support preferable habitat conditions for bull trout given the warmer water temperatures, lack of natural in-water or over-waters structures (i.e., large wood or forest canopy), unfavorable sandy substrates, and operational disturbance activities (i.e., boat moorage) within the marinas.

Marbled murrelet densities at the mouth of the Columbia River are less than one bird per square kilometer (Falxa et al. 2008[7]). Given the operational disturbance activities in the Warrenton and Hammond Marinas it is unlikely that marbled murrelets will be present (i.e., foraging) within the action area during proposed project activities. As such, given the location of the proposed project and existing disturbance activities, it is reasonably certain that proposed project activities will have no effect on marbled murrelets.

[7]Falxa, G., J. Baldwin, D. Lynch, S.K. Nelson, S.L. Miller, S.F. Pearson, C.J. Ralph, M.G. Raphael, C. Strong, T. Bloxton, B. Galleher, B. Hogoboom, M. Lance, R. Young, and M.H. Huff. 2008. *Marbled murrelet effectiveness monitoring, Northwest Forest Plan: 2004-2007 summary report. 25* pp.

B. Describe the existing navigation, fishing and recreational use of the waterbody or wetland.

The Columbia River is the most intensively used river in the western United States. The lower Columbia River estuary is heavily used by freighters, barges, tugs, commercial fishing boats, and recreational boats. The Warrenton and Hammond Marinas are used primarily to moor commercial and private fishing vessels as well as recreational vessels. The Skipanon Waterway is used by barges and tugs to transport logs from the lumber mill, and is also used to moor commercial fishing boats and recreational boats.

(7) PROJECT SPECIFIC CRITERIA AND ALTERNATIVES ANALYSIS

Describe project-specific criteria necessary to achieve the project purpose. Describe alternative sites and project designs that were considered to avoid or minimize impacts to the waterbody or wetland.*

Alternatives: As stated above, the purpose of the proposed project is to replace up to 385 existing, deteriorated wood and steel pilings (of various diameter). The existing pilings are in a deteriorated condition and require in-kind replacement in order to maintain operability and longevity of the marinas. Other than a No Action alternative, no other alternative analysis was conducted. However, during project design, the project team did consider ways to minimize in-water impacts by utilizing a vibratory hammer for piling replacement, and limiting piling installation to the SLOPES IWWP for the lower Columbia.

(8) ADDITIONAL INFORMATION

Are there any state or federally listed species on the project site?	☒ Yes	☐ No	☐ Unknown
Is the project site within designated or proposed critical habitat?	☒ Yes	☐ No	☐ Unknown
Is the project site within a national Wild and Scenic River?	☐ Yes	☒ No	☐ Unknown
Is the project site within a State Scenic Waterway?	☐ Yes	☒ No	☐ Unknown
Is the project site within the 100-year floodplain?	☒ Yes	☐ No	☐ Unknown

If yes to any above, explain in Block 6 and describe measures to minimize adverse effects to these resources in Block 7.

Is the project site within the Territorial Sea Plan (TSP) Area? **If yes, attach TSP review as a separate document for DSL.**	☐ Yes	☒ No	☐ Unknown
Is the project site within a designated Marine Reserve? **If yes, certain additional DSL restrictions will apply.**	☐ Yes	☒ No	☐ Unknown
Will the overall project involve ground disturbance of one acre or more? **If yes, you may need a 1200-C permit from the Oregon Department of Environmental Quality (DEQ).**	☐ Yes	☒ No	☐ Unknown
Is the fill or dredged material a carrier of contaminants from on-site or off-site spills?	☐ Yes	☒ No	☐ Unknown
Has the fill or dredged material been physically and/or chemically tested? **If yes, explain in Block 6 and provide references to any physical/chemical testing report(s).**	☐ Yes	☒ No	☐ Unknown
Has a cultural resource (archaeological and/or built environment) survey been performed on the project area?	☐ Yes	☐ No	☒ Unknown
Do you have any additional archaeological or built environment documentation, or correspondence from tribes or the State Historic Preservation Office? **If yes, provide a copy of the survey and/or documentation of correspondence with this application to the Corps only. Do not describe any resources in this document. Do not provide the survey or documentation to DSL.**	☐ Yes	☒ No	☐ Unknown

Is the project part of a DEQ Cleanup site? ☒ No ☐ Yes Permit number _____ DEQ contact._____

Will the project result in new impervious surfaces or the redevelopment of existing surfaces? Yes ☐ No ☒
If yes, the Applicant must submit a post-construction stormwater management plan as part of this application to DEQ's 401 WQC program for review and approval, see https://www.oregon.gov/deq/FilterDocs/401wqcertPostCon.pdf

Identify any other federal agency that is funding, authorizing or implementing the project.

Agency Name	Contact Name	Phone Number	Most Recent Date of Contact

List other certificates or approvals/denials required or received from other federal, state or local agencies for work described in this application.

Agency	Certificate / approval / denial description	Date Applied
NMFS	SLOPES Approval	

Other DSL and/or Corps Actions Associated with this Site (Check all that apply):

☐ Work proposed on or over lands owned by or leased from the Corps (may require USC 408 authorization)

☒ State Owned Waterway DSL Waterway Lease # 20898-ML

☐ Other Corps or DSL Permits Corps # NWP-2022-176 DSL # 63798-RF

☐ Violation for Unauthorized Activity Corps # _____ DSL # _____

☐ Wetland and Waters Delineation Corps # _____ DSL # _____

Submit the entire delineation report to the Corps; submit only the concurrence letter (if complete) and approved maps to DSL. If not previously submitted to DSL, send under a separate cover letter.

(9) IMPACTS, RESTORATION/REHABILITATION, COMPENSATORY MITIGATION

A. Describe unavoidable environmental impacts that are likely to result from the proposed project. Include permanent, temporary, and direct and indirect impacts.

Permanent/Direct Impacts: The proposed project will replace up to 385 existing, wood and steel pilings (of various diameter) in-kind, resulting in a balanced removal/fill below the HMT of the Skipanon Waterway and Columbia River. Given the existing baseline conditions within the project area (i.e., boat operation and moorage), existing substrates (primarily silt and sand), lack of habitat complexity, and balanced removal/fill; it is reasonably certain that the proposed project will not result in any adverse change in the instream or downstream functions (i.e., hydrologic, geomorphic, biological, or chemical/nutrient) of the Skipanon Waterway or Columbia River. Potential direct effects of the proposed project on ESA-listed species and their habitats (e.g., hydroacoustic sound pressure and minor alteration of substrates) will be consistent with those addressed under the SLOPES IV In-water/Over-water Structures Programmatic.

Temporary Impacts: The proposed project may require temporary placement of spud piles to stabilize the barge during piling removal and installation.

Indirect Impacts: The proposed project will result in minor alteration of in-water substrates associated with proposed piling replacement activities. However, given the significantly altered condition of the project area, existing disturbance activities (i.e., boat operation and moorage), existing substrates (primarily silt and sand), and lack of habitat complexity; it is unlikely that the project area currently provides preferred foraging or shoaling habitat for migratory fish species. As such, it is reasonably certain that minor alteration of existing substrates will not result in any long-term, significant effect to existing baseline conditions or result in any net change in function of the instream habitat. Potential indirect effects of the proposed project modification on ESA-listed species and their habitats (i.e., minor alteration of substrates) will be consistent with those addressed under the SLOPES IV In-water/Overwater Structures Programmatic.

B. For temporary removal or fill or disturbance of vegetation in waterbodies, wetlands or riparian (i.e., streamside) areas, discuss how the site will be restored after construction to include the timeline for restoration.

N/A

Compensatory Mitigation

C. Proposed mitigation approach. Check all that apply:

☐ Permittee-responsible Onsite Mitigation	☐ Permittee-responsible Offsite Mitigation	☐ Mitigation Bank or In-lieu Fee	☐ Payment to Provide (not approved for use with Corps permits)

D. Provide a brief description of proposed mitigation approach and the rationale for choosing that approach. If you believe mitigation should not be required, explain why.

As discussed above, the proposed project will replace up to 385 existing, wood and steel pilings in-kind, and will result in balanced removal/fill below the HMT of the Skipanon Waterway and Columbia River. As such, it is anticipated that the proposed replacement project will be self-mitigating, and additional mitigation measures will not be required.

Functional Assessment: OAR 141-085-0685 requires that a functional assessment be conducted for impacts to waters of the state. Given the relative size of the waterbodies (Skipanon Waterway and Columbia River), the best professional judgement (BPJ) methodology has been employed for this assessment.

In accordance with OAR 141-085-0685(4)(f)(A) and (B), the functions and values of the Skipanon Waterway and Columbia River within the project area were assessed and rated based on eleven stream functions within four broad functional groups (hydrologic, geomorphic, biological, and water quality), as outlined in the *Stream Function Assessment Method* (SFAM) developed by the DSL and U.S. Environmental Protection Agency (EPA).

Grouped Functions	Existing		Proposed	
	Function Group Rating	Value Group Rating	Function Group Rating	Value Group Rating
Hydrologic Functions (SWS, SST, FV)	Moderate	Low	Moderate	Low
Geomorphic Functions (SC, SM)	Moderate	Low	Moderate	Low
Biological Functions (MB, CMH, STS)	Low	Moderate	Low	Moderate
Water Quality Functions (NC, CR, TR)	Low	Moderate	Low	Moderate

Hydrologic functions (surface water storage, sub-surface transfer, and flow variation) are assessed through an evaluation of five function attributes, including overbank flow, effective discharge, base flow, groundwater flux, and riparian structure and composition. The Warrenton and Hammond Marinas are located along the eastern shore of the Skipanon Waterway and the southern shoreline of the Columbia River, respectively. As stated above, much of the Skipanon Waterway has been altered (straightened and widened) through historic dredging and lined with riprap, and the majority of riparian vegetation has been removed due to residential and industrial development. Recently removed tide gates located upstream of the project site have likely had the most significant effect on the hydrologic function of the Skipanon Waterway. In addition, up-basin logging and agricultural activities likely affect the historic hydrologic function of the river.

The location of the Hammond Marina is considered a high energy area of the Columbia River with strong lateral currents. The riverbanks at this location are armored and contain minimal riparian vegetation. Changes in the contributing watershed, including presence of large-scale dams upstream of the project area which regulate flow, industrial development, reductions in the riparian reserves, and increased stormwater runoff have influenced hydrologic function within the project area. River flows within the project area are relatively consistent as a result of hydrological regulation at upstream dams, but are still subject to twice-daily tidal fluctuations.

Given the location of the proposed project (within existing marinas) and existing baseline conditions, it is reasonably certain that the proposed piling replacement activities will not result in any net change in the hydrologic function of the Skipanon Waterway or Columbia River.

Grouped Function	Specific Functions	Pre Function and Value	Post Function and Value
Hydrologic Functions	Surface water storage (SWS)	Function rating: Moderate Value rating: Low	Function rating: Moderate Value rating: Low
	Sub/surface transfer (SST)	Function rating: Moderate Value rating: Low	Function rating: Moderate Value rating: Low
	Flow variation (FV)	Function rating: Moderate Value rating: Low	Function rating: Moderate Value rating: Low

Geomorphic functions (sediment continuity and substrate mobility) are assessed through an evaluation of six function attributes, including overbank flow, effective discharge, bed mobility, sediment character, bank stability, and hydraulic variability. Generally, the project area has reduced geomorphic function due to development within the surrounding landscape. Much of the Skipanon Waterway has been channelized and is bound by riprap shorelines as well as residential and industrial development. The Hammond Marina is also armored and contains minimal riparian vegetation, and is bound by breakwaters which provide protected access for vessels. Substrates within and around the project area consist primarily of silt and sand. Given the existing baseline conditions within the existing marinas, and proposed piling replacement activities, it is reasonably certain that the proposed project will not result in any net change in the geomorphic function of the Skipanon Waterway or Columbia River.

Grouped Function	Specific Functions	Pre Function and Value	Post Function and Value
Geomorphic Functions	Sediment continuity (SC)	Function rating: Moderate Value rating: Low	Function rating: Moderate Value rating: Low
	Substrate mobility (SM)	Function rating: Moderate Value rating: Low	Function rating: Moderate Value rating: Low

Biological functions: (biodiversity maintenance, aquatic/riparian habitat creation, and trophic level maintenance) are assessed through an evaluation of twelve function attributes, including overbank flow, effective discharge, base flow, bed mobility, sediment character, bank stability, hydraulic variability, stream habitat, riparian structure and composition, aquatic species structure and composition, water quality, and sedimentation. The reductions in riparian reserves, poor water quality, and alterations to the land use in the surrounding landscape, as well as increased stormwater runoff, have contributed to reduced biological functions within the project area. Riparian reserves are fragmented and poorly connected. The project reach does not meet NMFS standards for large wood and recruitment is low. Pool frequency and quality are not properly functioning due to low large wood recruitment. Off-channel habitat and refugia are also not properly functioning due to insufficient size, number, and connectivity.

Short-term, localized, project-related increases in background turbidity levels may occur as a result of proposed piling replacement activities below the HMT. In the short-term, increases in turbidity can reduce forage quantity for aquatic species, and disrupt behavioral patterns such as feeding and sheltering. Exposure duration is a critical determinant of physical or behavioral turbidity effects. Most aquatic species have evolved in systems that periodically experience short-term pulses (days to weeks) of high suspended sediment loads, often associated with flood events, and are adapted to such seasonal high pulse exposures.

Given the existing altered condition and reduced biological functions of the project area and associated shoreline, existing site use for boat moorage, and existing substrate conditions (primarily silt and sand); it is unlikely that these areas of the Skipanon Waterway and Columbia River provide preferred foraging or shoaling habitat for aquatic species. Forage quantity for aquatic species may be temporarily reduced within the immediate in-water work area as benthic organisms become disturbed by proposed construction activities; however, recolonization of benthic organisms will likely occur within a month following project completion.

Grouped Function	Specific Functions	Pre Function and Value	Post Function and Value
Biological Functions	Maintain biodiversity (MB)	Function rating: Low Value rating: Moderate	Function rating: Low Value rating: Moderate
	Create and maintain habitat (aquatic/riparian) (CMH)	Function rating: Low Value rating: Moderate	Function rating: Low Value rating: Moderate
	Sustain trophic structure (STS)	Function rating: Low Value rating: Moderate	Function rating: Low Value rating: Moderate

Chemical and nutrient functions (including nutrient cycling, chemical regulation, and thermal regulation) are assessed through an evaluation of seven function attributes, including overbank flow, base flow, groundwater flux, bank stability, riparian structure and composition, water quality, and water temperature. Urban development in the surrounding landscape and a fragmentation of riparian reserves has contributed to reduced chemical and nutrient functions. As discussed above, the Skipanon Waterway within the project area is on the ODEQ 303(d) list for fecal coliform, dissolved oxygen, alkalinity, chloride, and iron; and the lower Columbia River is currently 303(d)-listed for arsenic, DDE, fecal coliform, methylmercury, PCBs, and dissolved oxygen.

Equipment operating within the river channels represents potential sources of chemical contamination. Accidental spills of construction materials or petroleum products would adversely affect water quality. Development and implementation of a Pollution Control Plan (PCP) that will include containment measures

and spill response for construction-related chemical hazards will significantly reduce the likelihood of chemical releases within the project area. The project sites are currently used to moor fishing and recreational vessels, and proposed piling replacement activities will not increase existing chemical and nutrient functions within the Skipanon Waterway or Columbia River. As such, it is reasonably certain that the proposed piling replacement activities will have no measurable effect on the chemical and nutrient functions of these waterbodies.

Grouped Function	Specific Functions	Pre Function and Value	Post Function and Value
Water Quality Functions	Nutrient cycling (NC)	Function rating: Low Value rating: Moderate	Function rating: Low Value rating: Moderate
	Chemical regulation (CR)	Function rating: Low Value rating: Low	Function rating: Low Value rating: Low
	Thermal regulation (TR)	Function rating: Moderate Value rating: Moderate	Function rating: Moderate Value rating: Moderate

Mitigation Bank / In-Lieu Fee Information:

Name of mitigation bank or in-lieu fee project: _____

Type and amount of credits to be purchased: _____

If you are proposing permittee-responsible mitigation, have you prepared a compensatory mitigation plan?

☐ **Yes.** Submit the plan with this application and complete the remainder of this section.

☐ **No.** A mitigation plan will need to be submitted (*for DSL, this plan is required for a complete application*).

Mitigation Location Information (Fill out only if permittee-responsible mitigation is proposed)

Mitigation Site Name/Legal Description	Mitigation Site Address	Tax Lot #	
County	City (nearest)	Latitude & Longitude (in DD.DDDD format)	
Township	Range	Section	Quarter/Quarter

(10) ADJACENT PROPERTY OWNERS FOR PROJECT AND MITIGATION SITE

☐ **Pre-printed labels of adjacent property owners attached separately (only if more than 30 adjacent owners)**

Warrenton Marina

Tax Lot 00400
Dulcich Realty, LLC
16797 SE 130th Ave.
Clackamas, OR 97015

Tax Lot 00402
Steven Coleman
30600 S. Arrow St.
Canby, OR 97013

Hammond Marina

Tax Lots 00100 / 00201 / 00202 / 00400
U.S.A. / USCG

Tax Lots 00300 / 03401
City of Warrenton and Town of Hammond
PO Box 250 | 501 NE Harbor Pl.
Warrenton, OR 97146

Tax Lot 00800
Port Warren Moorage Association
346 NE Skipanon Dr.
Warrenton, OR 97146

Tax Lots 00500 / 00504
Stopwater, LLC
100 16th St.
Astoria, OR 97103

Tax Lot 08000
Nisa Blackler
PO Box 892
Warrenton, OR 97146

Tax Lot 07900
Justin Baughman
615 E Harbor Dr.
Warrenton, OR 97146

Tax Lot 07800
Donald Cook
625 E Harbor Dr.
Warrenton, OR 97146

Tax Lot 07700
Michael Eide
637 E Harbor Dr.
Warrenton, OR 97146

Tax Lot 07600
Steven Hatch
647 E Harbor Dr.
Warrenton, OR 97146

Tax Lot 07500
G&S Estates, LLC
6420 SW Laber Rd.
Portland, OR 97221

Tax Lots 07400 / 07300 / 07200 / 09400
Bergerson Family Trust
PO Box 554
Warrenton, OR 97146

Tax Lots 09501 / 07101 / 07100 / 07000
Roy Allgeyer Trust
PO Box 441
Warrenton, OR 97146

Tax Lot 03400
Cuong M. Nguyen
9220 SE Hunters Bluff Ave.
Happy Valley, OR 97086

Tax Lots 02100 / 02200
Andrew Larsen
11593 SE Aquila St.
Happy Valley, OR 97086

Tax Lot 02300
Shayna Olson
1060 3rd Ave.
Hammond, OR 97121

Tax Lots 02400 / 02500 / 02701 / 02800 / 02900 / 03000
Quinnat, LLC
11219 NW 4th Ct.
Vancouver, WA 98685

Tax Lot 01001
Charles Morton
1205 3rd Ave.
Hammond, OR 97121

Tax Lot 00900
Laird Adkins
237 Lake Dr.
Hammond, OR 97121

Tax Lot 00501
Timothy Wahlman
13819 NE 76th St.
Vancouver, WA 98682

Tax Lot 00500
Ronald & Mary Cordell
PO Box 296
Hammond, OR 97121

(11) CITY/COUNTY PLANNING DEPARTMENT LAND USE AFFIDAVIT

(TO BE COMPLETED BY LOCAL PLANNING OFFICIAL)

I have reviewed the project described in this application and have determined that:

- ☐ This project is not regulated by the comprehensive plan and land use regulations.
- ☑ This project is consistent with the comprehensive plan and land use regulations.
- ☐ This project is consistent with the comprehensive plan and land use regulations with the following:
  - ☐ Conditional Use Approval
  - ☐ Development Permit
  - ☐ Other Permit (explain in comment section below)
- ☐ This project is not currently consistent with the comprehensive plan and land use regulations. To be consistent requires:
  - ☐ Plan Amendment
  - ☐ Zone Change
  - ☐ Other Approval or Review (explain in comment section below)

An application or variance request ☐ has ☐ has not been filed for approvals required above.

Local planning official name (print)	Title	City/County
Matthew Ellis	Planning Director	Warrenton

Signature	Date
Matthew Ellis	12/3/24

Comments:

(12) COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. The signed statement will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program and consistency review of federally permitted projects, contact DLCD at 635 Capitol Street NE, Suite 150, Salem, Oregon 97301 or call 503-373-0050, or click here.

CERTIFICATION STATEMENT

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print/Type Applicant Name	Title
Jessica McDonald	Harbormaster (City of Warrenton)

Applicant Signature	Date
JMcDonald	12.3.24

(13) SIGNATURES

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities. By signing this application I consent to allow Corps or DSL staff to enter into the above-described property to inspect the project location and to determine compliance with an authorization, if granted. I hereby authorize the person identified in the authorized agent block below to act in my behalf as my agent in the processing of this application and to furnish supplemental information in support of this permit application. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirement of obtaining the permits requested before commencing the project. I understand that payment of the required state processing fee does not guarantee permit issuance.

To be considered complete, the fee must accompany the application to DSL. The fee is not required for submittal of an application to the Corps.

Fee Amount Enclosed	$ 990.00

Applicant Signature (required) must match the name in Block 2

Print Name	Title
Jessica McDonald	Harbormaster (City of Warrenton)
Signature: JMcDonald	Date: 12.3.24

Authorized Agent Signature

Print Name	*Title*
Eric Campbell	Principal (Campbell Environmental)
Signature: Eric Campbell	Date: 12/3/24

Landowner Signature(s)*

Landowner of the Project Site (if different from applicant)

Print Name	Title
Esther Moberg	City Manager
Signature: Esther Moberg	Date: 12/3/2024

Landowner of the Mitigation Site (if different from applicant)

Print Name	Title
Signature	Date

Department of State Lands, Property Manager (to be completed by DSL)

If the project is located on state-owned submerged and submersible lands, DSL staff will obtain a signature from the Land Management Division of DSL. A signature by DSL for activities proposed on state-owned submerged/submersible lands only grants the applicant consent to apply for a removal-fill permit. A signature for activities on state-owned submerged and submersible lands grants no other authority, express or implied and a separate proprietary authorization may be required.

Print Name	Title
Signature	Date

*Not required by the Corps

(14) ATTACHMENTS

☒ **Drawings**
- ☒ **Location map with roads identified** (Attachment A, Figure 1)
- ☒ **U.S.G.S. topographic map** (Attachment A, Figure 1)
- ☒ **Tax lot map** (Attachment A, Figures 2A and 2B)
- ☒ **Recent aerial photo** (Attachment A, Figures 3A, 3B, and 3C)
- ☒ **Site plan(s)** (Attachment A, Figures 3A, 3B, and 3C)
- ☒ **Plan view and cross section drawing(s)** (Attachment A, Figures 3A, 3B, and 3C)
- ☐ Project photos
- ☐ Erosion and Pollution Control Plan(s), if applicable
- ☐ DSL/Corps Wetland Concurrence letter and map, if approved and applicable

☐ Pre-printed labels for adjacent property owners (required if more than 30)

☐ **Incumbency Certificate** if applicant is a partnership or corporation

☐ Restoration plan or rehabilitation plan for temporary impacts

☐ Mitigation plan

☐ Wetland functional assessments, if applicable
- ☐ Cover Page
- ☐ Score Sheets
- ☐ ORWAP OR, F, T, & S Forms
- ☐ ORWAP Reports
- ☐ Assessment Maps
- ☐ ORWAP Reports: soils, topo, assessment area, contributing area

☐ Stream Functional Assessments, if applicable
- ☐ Cover Page
- ☐ Score Sheets
- ☐ SFAM PA, PAA, & EAA forms
- ☐ SFAM Report
- ☐ Assessment Maps
  - ☐ Aerial photo site map and topo site map (both maps should document PA, PAA, & EAA)

☐ Compensatory Mitigation (CM) Eligibility and Accounting Worksheet
- ☐ Matching Quickguide sheet(s)
- ☐ CM Eligibility and Accounting sheet

☐ Alternatives analysis

☐ Biological Assessment (if requested by the Corps)

☐ Stormwater management plan (may be required by the Corps or DEQ)

☒ Other:
- ☒ SLOPES IV Action Notification Form (Attachment B)
- ☒ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

For U.S. Army Corps of Engineers, send application to:

USACE Portland District
ATTN: CENWP-OD-GP
Box 2946
Portland, OR 97208-2946
Phone: 503-808-4373
portlandpermits@usace.army.mil

Counties: Baker, Benton, Clackamas, Clatsop, Columbia, Gilliam, Grant, Hood River, Jefferson, Lincoln, Linn, Malheur, Marion, Morrow, Multnomah, Polk, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco, Washington, Wheeler, Yamhill

OR

US Army Corps of Engineers
ATTN: CENWP-ODG-E
211 E. 7th Avenue, Suite 105
Eugene, OR 97401-2722
Phone: 541-465-6868
portlandpermits@usace.army.mil

Counties: Coos, Crook, Curry, Deschutes, Douglas, Jackson, Josephine, Harney, Klamath, Lake, Lane

For Department of State Lands, send application to:

West of the Cascades:
Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
Phone: 503-986-5200
https://www.oregon.gov/dsl/WW/Documents/uploadinstructions_removalfill.pdf

East of the Cascades:
Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, Oregon 97701
Phone: 541-388-6112
https://www.oregon.gov/dsl/WW/Documents/uploadinstructions_removalfill.pdf

For Department of Environmental Quality:

Submit all application materials electronically through *Your DEQ Online*.

For questions related to *Your DEQ Online*, please visit the *Your DEQ Online* help page, email YourDEQOnline@deq.state.or.us, or call 503-229-6184

Attachment A

Figures

Figure 1: Location Map

Warrenton and Hammond Marinas Piling Replacement

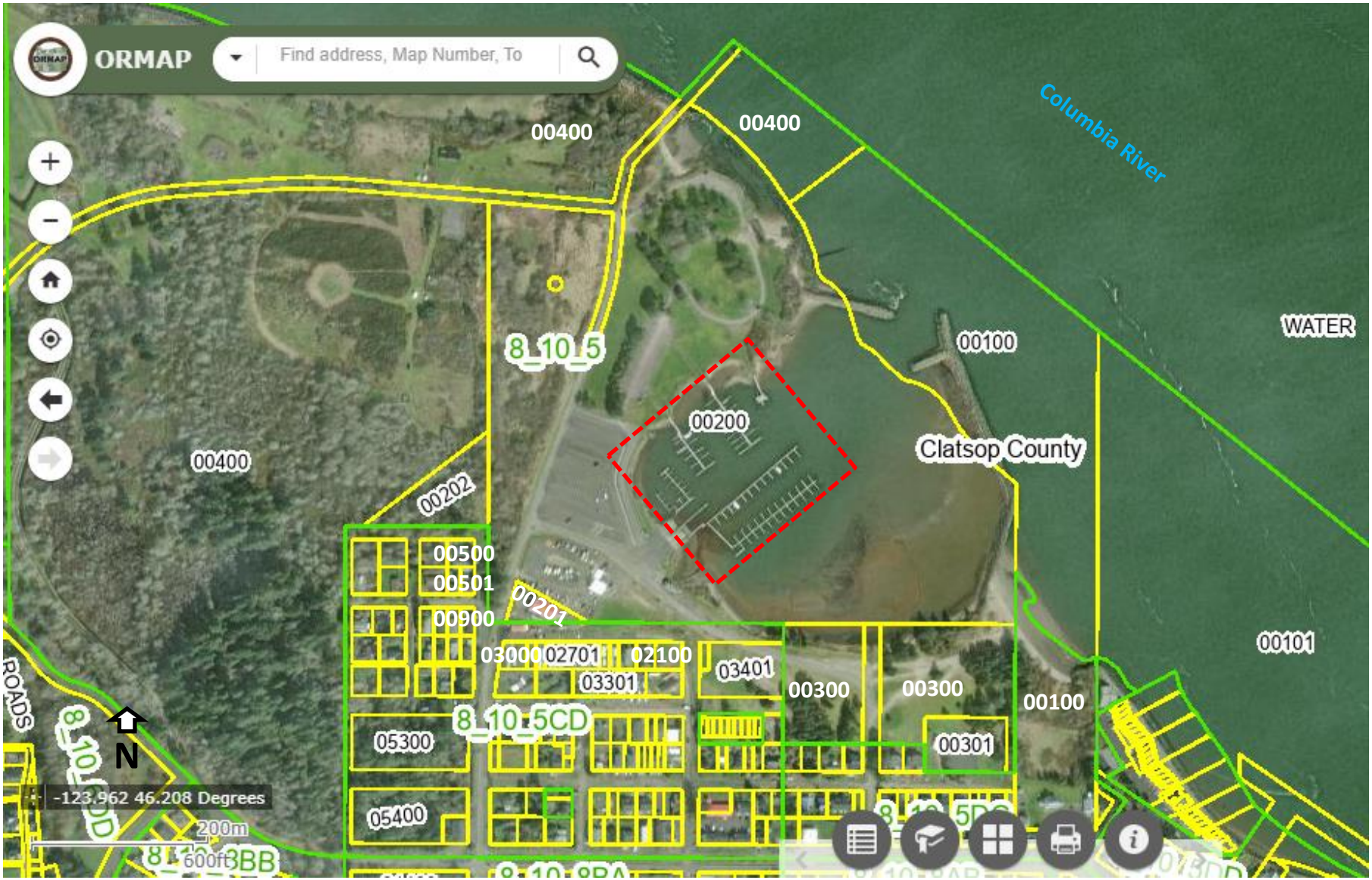
(USGS 2024)

Project Area

Figure 2A: Tax Lot Map (Warrenton Marina)

Warrenton and Hammond Marinas Piling Replacement

(ORMAP 2024)

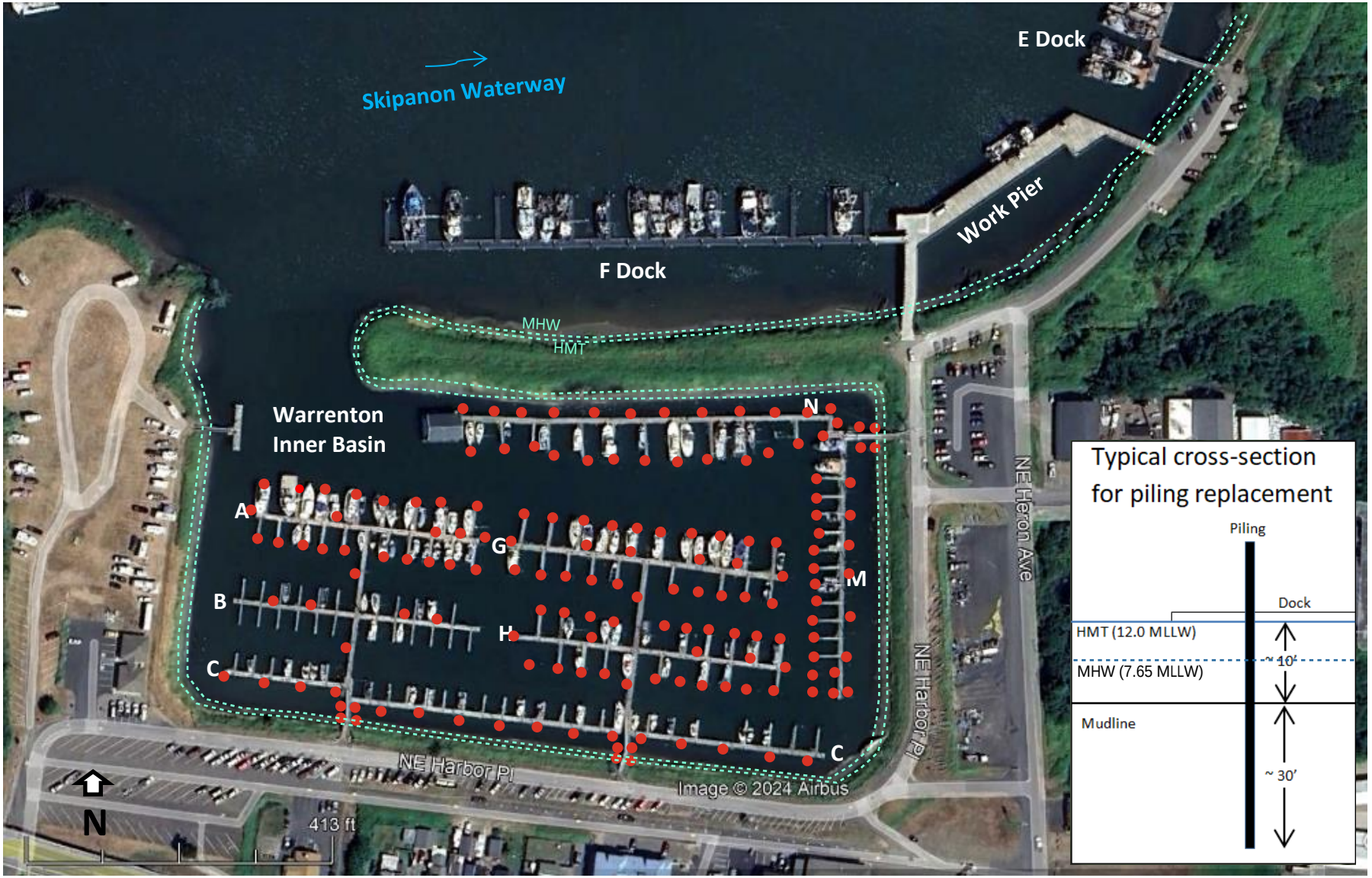


Project Area

Figure 2B: Tax Lot Map (Hammond Marina)

Warrenton and Hammond Marinas Piling Replacement

(ORMAP 2024)

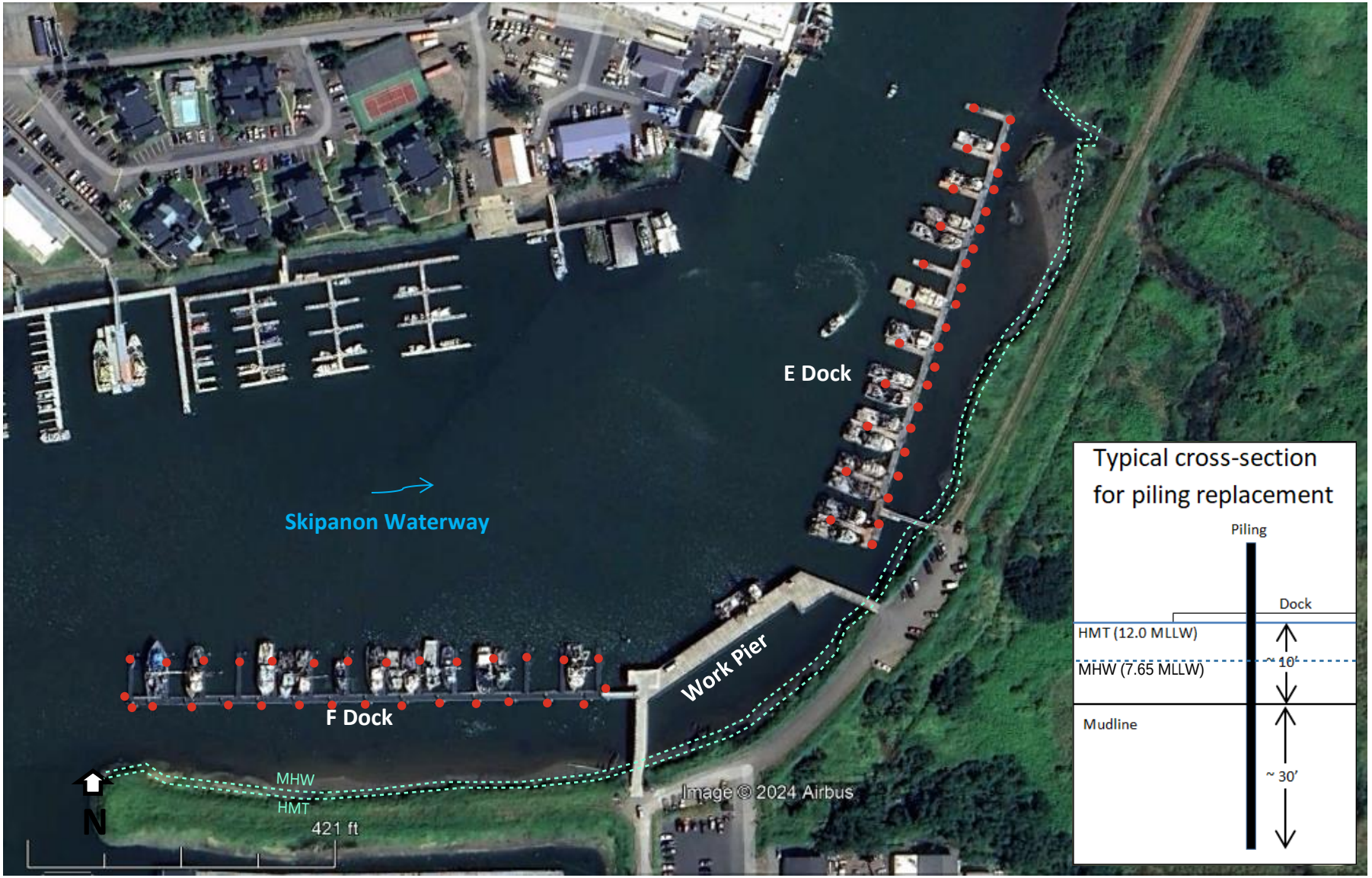


● Pilings proposed for replacement (158)

Figure 3A: Aerial Photograph (Warrenton Marina)

Warrenton and Hammond Marinas Piling Replacement

(Google Earth 2024)



● Pilings proposed for replacement (62)

Figure 3B: Aerial Photograph (Warrenton Marina)

Warrenton and Hammond Marinas Piling Replacement

(Google Earth 2024)

● Pilings proposed for replacement (165)

Figure 3C: Aerial Photograph (Hammond Marina)

Warrenton and Hammond Marinas Piling Replacement

(Google Earth 2024)

Attachment B

SLOPES IV Action Notification Form

SLOPES IV PROGRAMMATIC – IN-WATER OVER-WATER STRUCTURES ACTION NOTIFICATION FORM

Submit this completed action notification form with the following information to NMFS at slopes.nwr@noaa.gov. The SLOPES IV Programmatic e-mail box is to be used for **Incoming Only**.

NMFS Review and Approval. All actions must be individually reviewed and approved by NMFS as consistent with this opinion before that action is authorized. NMFS will notify the Corps within 30 calendar days if the action is approved or disqualified. Attach engineering designs and the results of a site assessment for contaminants to identify the type, quantity, and extent of any potential contamination.

Attach a copy of the erosion and pollution control plan, if required.

DATE OF REQUEST: _____ **NMFS Tracking #: 2011/05585**

Statutory Authority: ☐ ESA ONLY ☐ EFH ONLY ☒ ESA & EFH INTEGRATED

Lead Action Agency: Corps of Engineers

Action Agency Contact: _____ Individual Corps Permit #: _____

Applicant: Jessica McDonald Individual DSL Permit #: _____

Action Title: Warrenton and Hammond Marinas Piling Replacement

6th Field HUC & Name: 170800060208; Skipanon River – Frontal Columbia River

Latitude & Longitude (including degrees, minutes, and seconds) 46.1660 N / -123.9172 W and 46.2031 N / -123.9499 W (WGS84)

Proposed Project: ***Start Date:*** October 2025 ***End Date:*** November 2029

Action Description:

The City of Warrenton (City) is requesting a five (5)-year permit to allow for in-kind replacement of up to 385 existing, deteriorated wood and steel pilings located within the Warrenton and Hammond Marinas in Clatsop County (see JPA Attachment A: Figures). The pilings support several moorage docks and tie-ups within the marinas that are utilized for mooring fishing and recreational vessels. Many of the existing pilings were installed in the 1980s and have begun to deteriorate both above and below the water's surface, and require replacement in order to maintain marina operability and longevity.

It is anticipated that an average of 77 pilings will be replaced each year, over the five (5)-year duration of the permit. In the event that not all 385 pilings can be replaced during the five (5)-year duration of the permit due to budget constraints and/or contractor availability, then the City will simply reapply for a permit extension after five years to complete the project.

Work within waters (i.e., below highest measured tide [HMT] of the Skipanon Waterway and Columbia River) will include in-kind replacement of up to 385, deteriorated wood and steel

pilings (ranging from 10 to 24 inches in diameter). Construction crews and equipment will access the project site via the existing docks and floating barges. The existing wood and steel pilings will be dislodged with a vibratory hammer and slowly lifted from the sediment and placed into a contained area for appropriate upland disposal. The proposed steel replacement pilings will be installed using a vibratory hammer to a depth of approximately 30 feet into the substrate. It is anticipated that each piling will require approximately 15 to 30 minutes of vibratory hammer use. In the event that the vibratory hammer cannot fully embed the replacement pilings due to obstructions below the substrate, use of an impact hammer may be required to seat the pilings to their required depth. It is estimated that the average installation rate will be four pilings per day. The contractor will implement appropriate sound attenuation methods as outlined below in the Measures to Minimize Impacts.

As stated above, the proposed project will replace up to 385 existing, wood and steel pilings in-kind, and will result in balanced removal/fill below the HMT of the Skipanon Waterway and Columbia River. As such, it is anticipated that the proposed replacement project will be self-mitigating, and additional mitigation measures will not be required.

Measures to Minimize Impacts: The following conservation measures have been incorporated into the proposed project design and construction methods to minimize and avoid potential adverse effects to aquatic species, their designated Critical Habitat elements, and Essential Fish Habitat (EFH):

- All piling replacement conducted below the HMT will occur during the SLOPES-required in-water work period (IWWP) for “pile driving” in the lower Columbia River estuary (October 1 – November 30), a period when Endangered Species Act (ESA)-listed species are less likely to be present within the vicinity of the project area.
- All pilings will be removed with a vibratory hammer. During piling removal, the following criteria will be implemented to minimize sediment disturbance and resuspension:
    - Install a floating surface boom to capture floating surface debris.
    - Consider the best tidal condition for piling removal; try to remove in-the-dry.
    - Keep all equipment (e.g., bucket, cable, vibratory hammer) out of the water, grip piles above the waterline, and complete work during low water and low current conditions.
    - Dislodge piling with a vibratory hammer, when possible; never intentionally break a pile.
    - “Wake” the piling by vibrating to break the friction bond between the piling and sediment.
    - Slowly lift the pile from the sediment and through the water column.
    - Place the pile in a containment basin on a barge deck, pier, or shoreline without attempting to clean or remove any adhering sediment.
    - Dispose of all removed piles, floating surface debris, any sediment spilled on work surfaces, and all containment supplies at a permitted upland disposal site.
- When a pile breaks or is intractable during removal, removal will continue as follows:
    - Every attempt short of excavation will be made to remove each piling, if a pile in uncontaminated sediment is intractable, breaks above the surface, or breaks below the surface, cut the pile or stump off at least 3 feet below the surface of the sediment.

- All new pilings will be installed with a vibratory hammer. In the event that the vibratory hammer cannot full embed the piles to the necessary depth, the contractor may use an impact hammer to seat the piles. Use of an impact hammer will be limited to daylight hours between 7 a.m. and 7 p.m.
- The contractor will initiate daily "soft-start" procedures to provide a warning and/or give species near piling removal and installation activities a chance to leave the area prior to a vibratory hammer operating at full capacity; thereby, exposing fewer species to loud underwater and airborne sounds.
    - A soft-start procedure will be used at the beginning of in-water piling removal and installation, or any time piling removal/installation has ceased for more than 30 minutes.
    - For vibratory hammer operation, the contractor will initiate noise from vibratory hammers for 15 seconds at reduced energy followed by a 30-second waiting period. The procedure shall be repeated two additional times.
    - For impact pile driving (if necessary), the contractor will provide an initial set of strikes from the impact hammer at reduced energy, followed by a 30-second waiting period, then two subsequent sets. (The reduced energy of an individual hammer cannot be quantified given the variations between individual drivers. In addition, the number of strikes will vary at reduced energy given that raising the hammer at less than full power and then releasing it results in the hammer bouncing as it strikes the pile, resulting in multiple strikes).
- During the use of an impact hammer (if required) a multi-level bubble curtain will be installed to reduce sound pressure levels. The bubble curtain system shall conform to the following:
    - If water velocity is greater than 1.6 feet per second, surround the piling being driven by a confined bubble curtain (e.g., a bubble ring surrounded by a fabric or non-metallic sleeve) that will distribute air bubbles around 100% of the piling perimeter for the full depth of the water column. Bubblers shall completely surround the pile.
    - Piling shall be completely engulfed in bubbles over the full depth of the water column at all times when an impact pile driver is in use. Bubbles are not required during vibratory pile driving.
- A Pollution Control Plan (PCP) will be prepared by the Contractor and carried out commensurate with the scope of the project that includes the following:
    - Best management practices to confine, remove, and dispose of construction waste.
    - Procedures to contain and control a spill of any hazardous material.
- All conditions of ODEQ's 401 Water Quality Certification will be followed.
- All equipment will be inspected daily for fluid leaks. Any leaks detected will be repaired before operation is resumed. Stationary power equipment (i.e., cranes) operated within 150 feet of the river will be diapered to prevent leaks.
- All new replacement pilings will be fitted with devices to prevent perching by piscivorous birds.

Type of Action:
Identify the type of action proposed.

☒ In-water Over-water Structure
☐ Access Maintenance
☒ Piling Installation or Removal

- *What is the number of impact hammer strikes per pile?*
  All piles wll be replaced with a vibratory hammer. However, in the event that the vibratory hammer cannot fully embed the pilings to the required depth, the contractor may use an impact hammer to seat the pilings to the required depth. If an impact hammer is used, up to 20 strikes per minute may be required.

- *What is the number of hours/minutes required to drive one pile and all piles?*
  It is anticipated that each pile will require approximately 15-30 minutes of vibratory hammer use.

- *What is the number of hours per day pile driving will occur?*
  All new pilings will be installed with a vibratory hammer. In the event that the vibratory hammer cannot fully embed the piles to the necessary depth, the contractor may use an impact hammer to seat the piles. Use of an impact hammer will be limited to daylight hours between 7 a.m. and 7 p.m.

- *What is the depth of water and type of substrate the piles will be driven in?*
  The highest measure tide (HMT) elevation within the vicinity of the project area ranges between 11.3 and 12.0 feet MLLW. Water depths average approximately 10 feet. Substrates throughout the project area are comprised primarily of silt and sand.

- *If an impact hammer is used, will it be the entire pile or the last few hits per pile?*
  Only the last few hits per piling, if the piling cannot be fully embedded using a vibratory hammer.

- *What is the diameter of the piles?*
  The piles proposed for removal range from 10 to 24-inches in diameter. The replacement steel piles will also range from 10 to 24-inches in diameter.

- *Will pile-driving be continuous?*
  No

- *Will be pile be driven straight or battered?*
  Straight

- *Will a template be used?*
  No

- *Pile type (H, round, etc)?*
  The piles proposed for removal are round wood and steel. The replacement piles will be round steel.

- *When is pile-driving proposed?*
  As discussed above, it is anticipated that all pilings will be installed with a vibratory hammer. However, in the event that the vibratory hammer cannot fully embed the pilings to the required depth, the contractor may use an impact hammer to seat the pilings to the required depth.

- *What life-stages are known to occur within the action area.*
  Adult migration and juvenile rearing within the vicinity of the action area.

- *If provided, what is the source of hydroacoustic assumptions?*

- *Installation plan/ schematics included?*
  See JPA

- *Pile spacing?*
  Varies

Residential Dock

- *Is the proposed dock within 100 ft of a tributary that supports a run of ESA listed fish?* *Yes__X__ No_____*

- *Is the pier leading to the float wider than 8 ft?* *Yes_____ No_____*

NMFS Species/Critical Habitat Present in Action Area:
Identify the species found in the action area:

Species:
☒ Lower Columbia River Chinook
☒ Upper Willamette River spring-run Chinook
☒ Upper Columbia spring-run Chinook
☒ Snake River spring/summer run Chinook
☒ Snake River fall-run Chinook
☒ Columbia River chum
☒ Lower Columbia River coho
☐ Oregon Coast coho salmon
☐ Southern Oregon/Northern California coasts coho
☒ Snake River sockeye
☒ Lower Columbia River steelhead
☒ Upper Willamette River steelhead
☒ Middle Columbia River steelhead
☒ Upper Columbia River steelhead
☒ Snake River Basin steelhead
☒ Southern Green sturgeon
☒ Eulachon

☒ Steller sea lion

EFH
☒ Salmon
☒ Coastal Pelagics
☐ Groundfish

Aquatic Vegetation

Is the project in a saltwater influenced area (estuary)? Yes ☒ No ☐
Has an aquatic vegetation survey been completed? Yes ☐ No ☒

If yes, include the results of the survey
If no, explain below why a survey was not conducted: All proposed construction activities will be conducted within existing marinas and within the footprint of the existing pilings.

Terms and Conditions:

Check the Terms and Conditions from the biological opinion that will be included as conditions on the permit issued for this proposed action. Please attach the appropriate plan(s) for this proposed action.

Administrative

- ☒ 5. Site access
- ☐ 6. Salvage notice
- ☒ 7. Action completion report
- ☐ 8. Site restoration/mitigation report

Construction

- ☒ 11. Pollution/erosion control
- ☐ 12. Stormwater management
- ☐ 13. Site restoration
- ☐ 14. Compensatory mitigation
- ☐ 15. Preconstruction activity
- ☐ 16. Site preparation
- ☒ 17. Heavy equipment
- ☒ 18. In-water work period
- ☐ 19. Work area isolation
- ☐ 20. Capture and release
- ☒ 21. Piling installation
- ☒ 22. Impact hammer usage
- ☐ 23. Pile driving near Stellar sea lions
- ☒ 24. Piling removal
- ☒ 25. Broken or intractable piling
- ☐ 26. Treated wood
- ☐ 27. Treated wood removal

Action Type

In-water Over-water Structure

- ☐ 28. Boat ramps
- ☐ 29. Educational signs
- ☐ 30. Flotation material
- ☐ 31. New or replacement floats
- ☒ 32. Piscivorous birds
- ☐ 33. Relocation of existing structures
- ☐ 34. Repair/replacement of covered moorage/boat houses

Access Management

- ☐ 35. Maintenance dredging

Minor Discharge

- ☐ 36. Functionality Dredging/Minor discharge